

USAFETAC/DS-78/004

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DATA PROCESSING BRANCH
USAFETAC
Air Weather Service (MAC)

LEVEL II

REVISED UNIFORM SUMMARY OF
SURFACE WEATHER OBSERVATIONS

MALMSTROM, FB MT/GREAT FALLS WEAN# 24112
N 47 30 W 111 11 FLD ELEV 3523 FT GFA WMO #

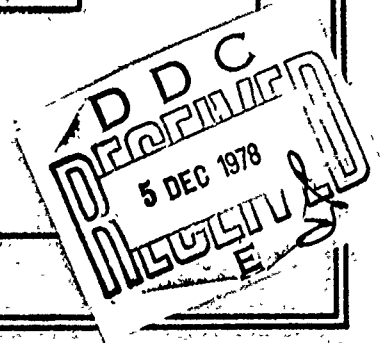
PARTS A-F

FOR FROM HOURLY OBS: DEC 67 - NOV 77
FOR FROM DAILY OBS: DEC 45 - NOV 77

JUN 12 1978

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FEDERAL BUILDING



78 11 20 036

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This technical report has been reviewed and is approved for publication.

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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18. SUPPLEMENTARY NOTES		BY DISTRIBUTION/AVAILABILITY CODES Dist. AVAIL. and/or SPECIAL A
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
*RUSSWO	Relative humidity	*Climatological data
*Montana	Daily temperature	Atmospheric pressure
Snowfall	Extreme snow depth	Extreme surface winds
Climatology	Sea-level pressure	Psychrometric summary
Surface winds	Extreme temperature	Ceiling versus visibility (over)
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This six-part statistical summary of surface weather observations for Malmstrom AFB, Great Falls, Montana contains the following parts: (A) Weather Conditions; Atmospheric Phenomena; (B) Precipitation, Snowfall and Snow Depth (daily amounts and extreme values); (C) Surface Winds; (D) Ceiling Versus Visibility; Sky Cover; (E) Psychrometric Summaries (daily maximum and minimum temperatures, extreme maximum and minimum temperatures, psychrometric summary of wet-bulb temperature depression versus dry-bulb temperature, means and standard deviations of dry-bulb, wet-bulb, and dew-point temperatures, and relative (over)		

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19. **Malmstrom AFB, Great Falls, Montana
Percentage frequency of distribution tables
Dry-bulb temperature versus wet-bulb temperature
Cumulative percentage frequency of distribution tables

20. humidity); and (F) Pressure Summary (means, standard deviations, and observation counts of station pressure and sea-level pressure). Data in this report are presented in tabular form, in most cases in percentage frequency of occurrence or cumulative percentage frequency of occurrence tables.

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THE VALUES CONTAINED HEREIN HAVE BEEN QUALITY CONTROLLED
(A) REMOVE ERRONEOUS DATA. HOWEVER, BECAUSE RESOURCES
AVAILABLE FOR QUALITY CONTROL ARE FINITE, A FEW ERRORS
MAY REMAIN; WHEN THEY HAPPEN, SUCH ERRORS USUALLY
APPEAR IN THE TABULATIONS AS A PERCENTAGE FREQUENCY OF ".0",
INDICATIVE OF ONLY ONE OCCURRENCE. THESE MAY OR MAY NOT BE
VALID. OBVIOUS ERRORS OR IMPOSSIBLE CONDITIONS WHICH WERE
NOT DISCOVERED UNTIL AFTER THE FINAL SUMMARY WAS PRODUCED
HAVE BEEN LINED THROUGH IN BLACK INK.

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS

HOURLY OBSERVATIONS

Hourly observations are defined as those record or record-special observations recorded at scheduled hourly intervals.

DAILY OBSERVATIONS

Daily observations are selected from all data recorded on reporting forms and combined into Summary of the Day observations. (Selected from record-special, local, summary of the day, remarks, etc.)

DESCRIPTION OF SUMMARIES

Preceding each section is a brief description of the data comprising each part of the Revised Uniform Summary of Surface Weather Observations and the manner of presentation. Tabulations are prepared from hourly and daily observations recorded by stations operated by the U. S. Services and some foreign stations using similar reporting practices.

Unless otherwise noted the following summaries are included for this station:

PART A WEATHER CONDITIONS

ATMOSPHERIC PHENOMENA

PART B PRECIPITATION

SNOWFALL

SNOW DEPTH

PART C SURFACE WINDS

PART D CEILING VERSUS VISIBILITY

SKYCOVER

PART E DAILY MAX, MIN, & MEAN TEMP

EXTREME MAX & MIN TEMP

PSYCHROMETRIC-DRY VS WET BULB

MEAN & STD DEV -
(DRY BULB, WET BULB, & DEW POINT)

RELATIVE HUMIDITY

PART F STATION PRESSURE

SEA LEVEL PRESSURE

STANDARD 3-HOUR GROUPS

All summaries requiring diurnal variations are summarized in eight 3-hour periods corresponding to the following sets of hourly observations: 0000-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300 hours local standard time.

MISSING HOUR GROUPS

Summary sheets are omitted when stations maintaining limited observing schedules did not report certain three-hour periods for any particular month during the available period of record. Such missing sheets are listed below, and are applicable to all summaries prepared from hourly observations.

JANUARY _____

APRIL _____

JULY _____

OCTOBER _____

FEBRUARY _____

MAY _____

AUGUST _____

NOVEMBER _____

MARCH _____

JUNE _____

SEPTEMBER _____

DECEMBER _____

78 11 28 036

STATION NO ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	FIELD ELEV (FT)	CALL SIGN	WFO NUMBER
24112	MALMSTROM AFB MONTANA/GREAT FALLS	N 47 30	W 111 11	3523	GFA	

STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FIELD (FT)	HT. BARO.	
1	Great Falls Montana	AAF	Dec 67	Jul 72	N 47 30	W 111 11	3523 ft	3465 ft	24
2	Same	Same	Aug 72	Nov 77	Same	Same	Same	Same	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1	Dec 67	Located 760 ft from centerline of Rnwy, 2240 ft ESE of Base Operations	AN/GMQ-11	RO-2	15 ft	
2	Apr 68	1. Located 500 ft NW of Rnwy, 250 ft SW of Taxiway S. 2. Located 1000 ft SW end of Rnwy 20, 500 ft SE from the centerline	Same	Same	Same	
3	Nov 77	1. Same 2. Same	Same Same	Same Same	13 ft Same	

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	

MAC-5A13, 111 80-8472

A

PART A

WEATHER CONDITIONS

This summary is a percentage frequency occurrence of various atmospheric phenomena and obstructions to vision, derived from hourly observations, and is presented in two tables as follows:

1. By month and annual, all hours and years combined.
2. By month, all years combined, by standard 3-hour groups.

A percent value of ".0" in these tables indicates less than .05 percent, which is usually only one occurrence. The various phenomena included in each category on the forms are listed below:

Thunderstorms - All reported occurrences of thunderstorm, tornado, and waterspout.

Rain and/or drizzle - All liquid precipitation, falling to the ground, not freezing.

Freezing rain and/or freezing drizzle (glaze) - Precipitation falling in liquid form, but freezing on contact with an unheated surface.

Snow and/or sleet (ice pellets) - Included are snow, snow pellets, sleet, snow grains, ice crystals, and ice pellets from Jan 68 and later. (Snow pellets also known as soft hail)

Hail - Occurrences of hail and small hail are included.

Percentage of observations with precipitation - Included in this category are the observations when one or more of the above phenomena occurred. Since more than one type of precipitation may be reported in the same observation, the sums of the individual categories may exceed the percentages of the observations with precip.

Fog - Included are fog, ice fog, and ground fog.

Smoke and/or haze - Occurrences of smoke, haze, or combinations of smoke and haze are included.

Blowing snow - Occurrences of blowing snow (also drifting snow when reported from non-WBAN sources).

Dust and/or sand - Included are blowing dust, blowing sand, and dust.

Continued on Reverse

Blowing spray - This item if reported, is not shown in a separate category on this form but is included in the computation Percentage of Observations with Obstructions to Vision, below.

Percentage of observations with obstructions to vision - Included in this category are the observations when one or more of the above obstructions to vision occurred. Since more than one type of obstruction may be reported in the same observation, the sums of the individual categories may exceed the percentage total columns. Also, although precipitation may reduce visibility, it is not considered an obstruction to vision for purposes of this summary; therefore, the percentage total of obstructions to vision need not reflect the total observations with reduced visibility.

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USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	00-02		.4	.2	20.5		21.2	5.2		.6		5.8	930
	03-05		.4	.2	22.7		22.9	6.5		.5		7.0	930
	06-08		.4	.2	22.3		22.7	7.6		.9		8.3	930
	09-11		.3		19.0		19.4	10.4	.1	1.4		11.9	930
	12-14		.4		16.9		17.1	9.1		1.2	.1	10.4	930
	15-17				14.4		14.4	6.9	.2	.6	.2	8.0	930
	18-20		.5	.2	17.1		17.5	5.5		.2		5.7	930
	21-23		.2	.2	17.7		18.2	4.8		.6		5.5	930
TOTALS			.3	.1	18.8		19.2	7.0	.0	.8	.0	7.8	7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
FEB	00-02				14.4		14.4	6.7		.4		7.1	849
	03-05		.1		13.2		13.3	6.8		.1		6.9	849
	06-08		.7		12.2		12.7	7.7		.4		7.7	849
	09-11		.2	.2	13.7		14.1	8.8	.2	.2	.1	9.0	849
	12-14		.5	.4	11.8		12.2	6.1	.5			6.1	849
	15-17		.1	.1	9.1		9.2	3.2	.1			3.2	849
	18-20		.1	.2	8.6		9.0	3.1				3.1	849
	21-23		.2	.1	13.2		13.4	3.9		.1		4.0	849
TOTALS			.2	.1	12.0		12.3	5.8	.1	.2	.0	5.9	6792

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 MARMSTROM AFB MT/GREAT FALLS 58-77 MAR
STATION STATION NAME YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAR	00-02		1.1		13.3		14.3	4.6		.4	.1	4.8	930
	03-05		1.4		12.2		13.4	4.7		.6	.1	5.1	930
	06-08		.8		12.9		13.7	5.4	.2	1.5		6.1	930
	09-11		.9		13.8		14.6	4.8	.4	1.4		5.7	930
	12-14		.2		12.4	.1	12.7	4.5	.5	1.2	.2	5.5	930
	15-17	.1	.4		11.0		11.3	3.1		1.4		3.8	930
	18-20		.9		10.3		11.2	2.4		1.6		3.7	930
	21-23		1.5		11.4		12.7	2.5		.9		3.3	930
TOTALS		.0	.9		12.2	.0	13.0	4.0	.1	1.2	.1	4.8	7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 MALMSTRUM AFB MT/GREAT FALLS 68-77
STATION STATION NAME YEARS APR MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
APR	00-02		2.9	.3	11.4		14.1	4.9		.2		5.1	900
	03-05		2.9	.3	12.7		15.8	5.2		.1		5.3	900
	06-08		3.3	.4	10.8		14.2	7.3		.2		7.3	900
	09-11		2.9		11.3		13.7	5.8		.3		5.8	900
	12-14	.1	3.6		10.8		13.1	4.6		.7		4.9	900
	15-17	.4	3.6		7.8		10.4	3.6		.4		3.8	900
	18-20	.3	3.9		5.6		8.4	2.2		.2		2.2	900
	21-23		4.0		10.0		12.8	3.4				3.4	900
TOTALS		.1	3.4	.1	10.1		12.8	4.6		.3		4.7	7200

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 STATION MALMSTROM AFB MT/GREAT FALLS 68-77 YEARS MAY MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
MAY	00-02	.3	10.3		.9		11.1	1.2				1.2	930
	03-05	.2	10.0		.6		10.4	1.5				1.5	930
	06-08		10.2		1.1		10.5	2.0				2.0	930
	09-11	.2	8.6		1.4		9.2	.9				.9	930
	12-14	1.1	11.1		1.4		11.8	1.1				1.1	930
	15-17	1.6	10.9		.6	.1	11.2	1.0				1.0	930
	18-20	.8	10.4		.3		10.5	.9				.9	930
	21-23	.6	11.2		.4		11.3	.8				.8	930
TOTALS		.6	10.3		.8	.0	10.8	1.2				1.2	7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUN	00-02	.1	7.3		.3		7.7	.6				.6	900
	03-05	.2	8.3		.3		8.7	1.7				1.7	900
	06-08		7.8		.3		8.1	3.8				3.8	900
	09-11	.1	8.7		.3		8.9	2.2				2.2	900
	12-14	1.2	8.4		.1		8.4	.2				.2	900
	15-17	3.3	10.2				10.2	.3				.3	900
	18-20	3.4	12.2			.1	12.2	1.0				1.0	900
	21-23	1.1	9.1		.3		9.2	.9				.9	900
TOTALS		1.2	9.0		.2	.0	9.2	1.3				1.3	7200

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 JUL
STATION STATION NAME YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUL	00-02	.1	2.8				2.8	.1				.1	930
	03-05	.5	5.1				5.1	.4				.4	930
	06-08	.9	3.3				3.3	1.1				1.1	930
	09-11	.4	4.2				4.2	.4				.4	930
	12-14	.3	1.6				1.6						930
	15-17	2.3	3.5		.1		3.5						930
	18-20	2.3	3.4		.3		3.4				.3	.3	930
	21-23	2.0	4.8		.2		4.8						930
TOTALS		1.1	3.6		.1		3.6	.3			.0	.3	7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 STATION MÅLMSTROM AFB MT/GREAT FALLS 68-77 YEARS AUG MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
AUG	00-02	1.0	5.7				5.7	.3				.3	930
	03-05	.3	4.4				4.4	.8				.8	930
	06-08	.1	5.7				5.7	1.1				1.1	930
	09-11	.1	5.2				5.2	.8				.8	930
	12-14	.4	4.8				4.8	.8				.8	930
	15-17	2.7	6.1				6.1	.5				.5	930
	18-20	3.2	7.1				7.1	.6				.6	930
	21-23	2.0	8.9				8.9	.2				.2	930
TOTALS		1.2	6.0				6.0	.6				.6	7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 STATION MALMSTROM AFB MT/GREAT FALLS 68-77 YEARS SEP MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
SEP	00-02		4.4		1.9		6.0	1.2				1.2	900
	03-05	.3	5.2		2.4		7.7	1.6				1.6	900
	06-08	.1	5.6		2.2		7.6	1.6				1.6	900
	09-11		5.6		1.7		7.1	1.9				1.9	900
	12-14	.1	3.4		1.4		4.8	1.2				1.2	900
	15-17	.2	5.3		.9		6.1	.8				.8	900
	18-20	.3	4.8		1.2		5.7	1.1				1.1	900
	21-23		5.4		1.2		6.4	.6				.6	900
TOTALS		.1	5.0		1.6		6.4	1.3				1.3	7200

DATA PROCESSING BRANCH
USAF ETAC
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WEATHER CONDITIONS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
OCT	00-02	.1	3.0	.1	6.1		9.1	3.1				3.1	930
	03-05		3.4		6.5		9.6	4.0				4.0	930
	06-08		2.7		6.2		8.8	4.1				4.1	930
	09-11		3.0		5.6		8.6	3.7				3.7	930
	12-14		2.5		6.0		8.2	2.8				2.8	930
	15-17		3.4		3.5		6.9	1.9				1.9	930
	18-20		4.3		4.1		8.1	1.7				1.7	930
	21-23	.2	3.4	.2	6.7		10.2	3.3				3.3	930
TOTALS		.0	3.2	.0	5.6		8.7	3.1				3.1	7440

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 NDV
STATION STATION NAME YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
NDV	00-02		1.1	.2	10.3		11.4	4.8		.9		5.7	900
	03-05		.9		9.2		10.1	6.2		1.0		7.2	900
	06-08		1.6	.2	8.4		10.2	7.1		.4		7.6	900
	09-11		1.2	.1	10.8		11.9	8.3	.1	.4		8.6	900
	12-14		1.6		5.7		10.8	5.0	.2	.9		5.6	900
	15-17		1.7		8.1		9.6	3.2		1.4		4.0	899
	18-20		.8		7.6		8.2	3.3		.7		3.9	897
	21-23		.6	.3	6.7		7.5	3.6		.7		4.2	897
TOTALS			1.2	.1	8.9		10.0	5.2	.0	.8		5.9	7193

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 STATION MALMSTROM AFB MT/GREAT FALLS STATION NAME 67-76 YEARS DEC MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL ¹ NO. OF OBS.
DEC	00-02				17.2		17.2	4.9		.9		5.8	930
	03-05				17.0		17.0	5.3		.8		6.0	930
	06-08		.3		16.7		16.9	5.8	.2	.8		6.3	930
	09-11			.2	15.8		16.0	6.0	.6	.9		6.8	930
	12-14		.5		15.1		15.6	5.2	.8	1.3		5.9	930
	15-17		.3		12.4		12.7	4.8	.1	.6		5.3	930
	18-20				15.8		15.8	4.6	.1	.8		5.4	930
	21-23		.2	.2	16.9		17.3	5.1		.6		5.7	930
TOTALS			.2	.1	15.9		16.1	5.2	.2	.8		5.9	7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

24112 STATION MALMSTROM AFB MT/GREAT FALLS 67-77 YEARS ALL MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	ALL		.3	.1	18.8		19.2	7.0	.0	.8	.0	7.8	7440
FEB			.2	.1	12.0		12.3	5.8	.1	.2	.0	5.9	6792
MAR		.0	.9		12.2	.0	13.0	4.0	.1	1.2	.1	4.8	7440
APR		.1	3.4	.1	10.1		12.8	4.6		.3		4.7	7200
MAY		.6	10.3		.8	.0	10.8	1.2				1.2	7440
JUN		1.2	9.0		.2	.0	9.2	1.3				1.3	7200
JUL		1.1	3.6		.1		3.6	.3			.0	.3	7440
AUG		1.2	6.0				6.0	.6				.6	7440
SEP		.1	5.0		1.6		6.4	1.3				1.3	7200
OCT		.0	3.2	.0	5.6		8.7	3.1				3.1	7440
NOV			1.2	.1	8.9		10.0	5.2	.0	.8		5.9	7193
DEC			.2	.1	15.9		16.1	5.2	.2	.8		5.9	7440
TOTALS			.4	3.6	.0	7.2	.0	10.7	3.3	.0	.3	3.6	87665

PART A

ATMOSPHERIC PHENOMENA

This summary is a presentation of the percentage of days with occurrence of various atmospheric phenomena. These data are obtained from all recorded information on the reporting forms or from hourly data and combined into a daily observation.

The descriptions of the phenomena in the Weather Conditions Summary above also apply for the categories summarized in these daily tabulations. However, it should be noted that in this summary the columns headed "% OF OBS WITH PRECIP" and "% OF OBS WITH OBST TO VISION" show the percentage of days rather than the percentage of observations. Since more than one type of precipitation or more than one type of obstruction may occur in the same daily observation, the sum of the values in the individual categories may differ from the total columns.

A percent value of ".0" in the table indicates less than .05 percent, which is usually only one occurrence.

This presentation is by month with annual totals, and is prepared with all years combined.

- NOTES: (1) A day with rain and/or drizzle was not separately reported in the WBAN data prior to year 1949. Therefore, percentages in this column are restricted to the period Jan 1949 and later.
- (2) A day with freezing rain and/or freezing drizzle is also properly reported as a day with rain and/or drizzle.
- (3) A day with dust and/or sand is included in this summary only when visibility is reduced to less than $5/8$ mile.

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

XXWEATHER CONDITIONS
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
ATMOSPHERIC PHENOMENA

24112 STATION MALMSTRDM AFB MT/GREAT FALLS 46-77 YEARS ALL MONTH

PERCENTAGE OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA
FROM DAILY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	DAILY		6.4	.5	47.5		50.3	24.7	2.1	5.3	.1	27.3	990
FEB		.2	6.3	.8	40.8	.1	43.3	21.0	1.7	3.8		23.2	901
MAR		.3	12.1	.1	41.6	.1	47.6	19.2	1.1	3.4	.1	21.4	991
APR		2.2	28.9	.9	29.6	.5	43.3	16.2	.6	1.3		16.8	959
MAY		10.1	51.1		7.4	1.6	50.0	9.6	.9	.1	.2	10.6	992
JUN		20.7	51.7		.9	1.9	50.0	7.8			.2	8.0	958
JUL		22.7	37.2		.1	1.8	35.7	2.2	.1		.1	2.4	992
AUG		18.3	39.6		.1	1.0	37.3	2.7	.1		.3	3.0	991
SEP		4.2	35.8	.3	6.2	.4	36.0	6.6	.1		.1	6.7	959
OCT		.8	24.0	1.2	15.2	.3	31.4	9.3	.2	.3		9.5	992
NOV			14.3	1.0	29.2		37.6	14.7	.7	2.6	.3	15.9	958
DEC		.1	7.8	1.6	37.7		40.8	20.0	1.7	.1		21.4	960
TOTALS		6.6	26.3	.5	21.4	.6	42.1	12.8	.8	1.7	.1	13.8	11643

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PART B PRECIPITATION, SNOWFALL & SNOW DEPTH

This part of the Uniform Summary consists of eight summaries derived from daily observations as follows:

- * 1. The first set presents, in three tables, the percentage frequency of various daily amounts of PRECIPITATION, SNOWFALL, and SNOW DEPTH. The daily amount summary is prepared by month and annual, all years combined, and includes percent of days with measurable amounts; percent of days having none, traces, and given amounts; and means, greatest and least monthly amounts. (The last three statistics are omitted from the snow depth summary because of their doubtful and limited value.) A total count of valid observations is given for months and annual. Stations are included in which a portion or all of the period may contain months with missing days. This will be noted on the summary pages. A percent value of ".0" in these daily amount tables indicates less than .05 percent which is usually only one occurrence.
- * 2. The second set of three tables presents the extreme daily amounts, by individual year and month, of PRECIPITATION, SNOWFALL, and SNOW DEPTH for the entire period of record available. Also provided are the means and standard deviations for each month and annual (all months) and the total valid observation count. An asterisk (*) is printed in any year-month block when the extreme value is based on an incomplete month (at least one day missing for the month). When a month has valid observations reported but no occurrences, zeros are given in the tables as follows:

EXTREME DAILY PRECIPITATION	".00"	equals none for the month (hundredths)
EXTREME DAILY SNOWFALL	".0"	equals none for the month (tenths)
EXTREME DAILY SNOW DEPTH	"0"	equals none for the month (whole inches)

3. The third set of two tables provides the total monthly amounts of PRECIPITATION and SNOWFALL for each year-month and annual. Also prepared are the means, standard deviations, and total number of valid observations for each month and annual (all months). An asterisk (*) is printed in each data block if one or more days are missing for the month. No occurrences for a month are indicated in the same manner as in the extreme tables above. If a trace becomes the extreme or monthly total in any of these tables it is printed as "TRACE."

Continued on Reverse Side

* Values for means and standard deviations do not include measurements from incomplete months.

- NOTES: (1) The above studies may also be prepared for stations operating for less than full months for portions or all of the period of record. This may include stations operating 5 or 6 days a week and those with only random days missing. An asterisk (*) in the data blocks will give an indication that a month is incomplete. Please refer to Station History at front of book and observation counts in each summary to evaluate the amounts of data missing.
- (2) Hail was included in snowfall occurrences in the summary of day observations prior to Jan 56, but these occurrences have been removed from snowfall category and counted as Hail in these summaries.
- (3) Snow Depth was recorded and punched at various hours during the period available from U. S. operated stations. The hours used by each service for each period are as follows:

Air Force Stations:

Beginning thru 1945	at 0800LST
Jan 46-May 47	at 1230GMT
Jun 57-present	at 1200GMT

U. S. Navy and National Weather Service (USWB)

Beginning thru Jun 52	at 0030GMT
Jul 52-May 57	at 1230GMT
Jun 57-present	at 1200GMT

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
PRECIPITATION
(FROM DAILY OBSERVATIONS)

24112 STATION HALLMSTRUM AFB MT/GREAT FALLS 45-77 YEARS

	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
PRECIP.	NONE	TRACE	.01	.02	.06	.11	.26	.51	1.01	2.51	5.01	10.01	OVER 20			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	47.6	25.5	4.6	9.1	6.6	4.4	1.4	.5	.1					26.9	992	.76	2.96	.09
FEB	53.8	23.1	4.2	8.7	4.8	4.1	1.2	.1						23.1	904	.53	1.68	.01
MAR	50.0	23.9	3.8	10.2	4.4	5.2	2.0	.4						26.1	992	.79	2.49	.09
APR	51.0	22.5	4.2	8.0	4.7	5.6	3.1	.5	.3					26.5	960	1.09	3.31	.06
MAY	47.2	22.1	2.7	7.0	4.0	8.1	4.3	2.7	1.6					30.7	991	2.56	6.55	.31
JUN	46.5	19.5	3.1	7.6	5.8	6.9	5.2	3.4	1.7	.2				34.0	959	2.80	5.17	.24
JUL	62.0	16.0	2.2	5.9	3.3	5.0	3.4	1.5	.5					22.0	992	1.31	3.75	TRACE
AUG	59.9	17.7	2.3	5.9	3.2	5.2	3.5	1.3	.6					22.4	992	1.41	4.89	.06
SEP	61.8	16.5	2.8	6.9	3.1	5.3	2.1	1.3	.3					21.8	960	1.01	3.41	.10
OCT	66.9	14.8	2.5	4.9	3.7	4.9	1.1	.8	.2					18.2	992	.76	2.79	TRACE
NOV	59.6	20.0	2.5	6.7	5.3	4.5	1.1	.2	.1					20.4	960	.69	3.93	.02
DEC	56.9	20.3	3.7	7.6	4.5	4.8	1.8	.3	.1					22.9	992	.74	2.01	.02
ANNUAL	55.3	20.2	3.2	7.4	4.4	5.3	2.5	1.1	.5	.0				24.6	11686	14.47		

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES

PRECIPITATION

(FROM DAILY OBSERVATIONS)

24112 MALHSTRGM AFB MT/GREAT FALLS 45-77

STATION

STATION NAME

YEARS

24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB	MAR.	APR	MAY	JUN	JUL	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45												.65	
46	.11	.09	.35	.38	.67	1.28	.57	.26	.56	.56	.64	.17	1.28
47	.31	.27	.72	.06*	.20*	1.13	.05	.18	.34	.20	.25	.32	* 1.13
48	.14	.09	.20	.20	1.14	1.19	.80	.35	.15	.39	.19	1.30	1.30
49	.88	.31	.35	.04	1.72	.73	.84	.15	.26	.40	.01	.30	1.72
50	.25	.01	.50	.29	.22	.94	1.59	2.00	.32	.02	.31	.13	2.00
51	.27	.73	.42	2.02	1.06	.46	1.05	.66	.70	.20	.19	.30	2.02
52	.08	.37	.26	.38	.32	.87	.13	.52	.14	.12	.18	.09	.87
53	.05	.32	.16	.46	2.05	3.01	TRACE	.91	.73	.18	.08	.35	3.01
54	.13	.20	.11	.17	.22	2.24	.41	.82	.73	1.27	.06	.02	2.24
55	.99	.36	.29	.75	1.28	.45	1.05	.05	.07	.33	.46	.34	1.28
56	.20	.08	.12	.24	.31	.72	.51	.35	.18	.24	.11	.28	.72
57	.14	.25	.13	.17	1.79	.74	.24	.33	.65	.14	.10	.05	1.79
58	.10	.44	.15	.25	.64	.87	.67	.21	.11	.16	.23	.30	.87
59	.21	.21	.09	.22	1.41	1.02	.11	.40	.75	.33	3.19	.22	3.19
60	.07	.25	.03	.53	.57	.43	.16	1.35	.13	.05	.30	.06	1.35
61	.08	.27	.47	.18	.64	.23	.53	.12	.39	.12	.26	.12	.64
62	1.11	.14	.20	.38	1.84	1.15	.31	1.16	.28	.75	.18	.18	1.84
63	.18	.13	.31	.43	.80	.79	.43	.20	.14	.33	.10	.30	.80
64	.37	.24	.42	.31	1.64	3.12	.42	.62	.12	TRACE	.23	.38	3.12
65	.64	.23	.09	.35	.51	1.80	.67	.80	.74	TRACE	.50	.30	1.80
66	.62	.31	.53	.39	1.03	.75	.62	1.09	.22	1.04	.31	.25	1.09
67	.34	.13	.84	.67	.48	.80	.49	.12	1.23	.82	.17	.38	1.23
68	.37	.08	.36	.63	1.48	1.06	.10	1.14	1.13	.03	.80	.76	1.48
69	.23	.14	.30	.10	.76	1.86	.50	.12	.10	.19	.11	.32	1.86
70	.26	.37	.22	.39	1.58	1.91	.46	.45	.12	.24	.12	.15	1.91
71	.17	.14	.36	.30	.57	.52	.19	.80	.98	.20	.04	.19	.98
72	.33	.19	.25	.22	1.02	.13	1.28	.43	.36	.22	.14	.42	1.28
73	.09	.08	.12	1.88	.58	.54	.07	.49	.70	.38	.18	.52	1.88
74	.16	.05	.22	.33	.92	1.57	.27	1.22	.47	.25	.13	.10	1.57
MEAN													
S. D.													
TOTAL OBS.													

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

EXTREME VALUES

PRECIPITATION

(FROM DAILY OBSERVATIONS)

^ STATION

STATION NAME

YEAR?

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
75	.31	.08	.26	1.82	.99	.93	.72	.54	.34	.95	.26	.07	1.82
76	.11	.19	.27	.50	.31	1.21	.59	1.61	.21	.15	.40	.16	1.61
77	.20	.07	.18	.13	.77	1.11	1.41	.45	1.02	.34	.10		
MEAN	.300	.213	.290	.474	.946	1.111	.542	.622	.449	.331	.323	.296	1.618
S. D.	.268	.145	.181	.498	.527	.720	.400	.479	.395	.314	.251	.248	.661
TOTAL OBS.	992	904	992	960	991	939	992	992	960	992	960	992	11686

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES
MONTHLY PRECIPITATION

(FROM DAILY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS

45-77

STATION

STATION NAME

YEARS

TOTAL MONTHLY PRECIPITATION IN INCHES

MONTH YEAR	JAN.	FEB.	MAR	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45												1.52	
46	.13	.19	.67	.54	2.03	3.51	1.49	.70	1.76	1.80	1.23	.41	14.46
47	.54	.79	1.18	.24*	.31*	2.02	.09	.30	.99	.36	1.25	.90	* 8.97
48	.73	.37	.93	.47	3.58	3.38	1.76	.59	.33	.39	.43	2.01	14.97
49	2.96	.73	1.00	.06	2.87	1.70	1.41	.24	.61	.93	.02	.76	13.29
50	.87	.01	1.88	1.13	.66	2.01	3.75	3.20	.44	.05	.93	.19	15.12
51	.42	.95	1.34	2.24	1.85	2.04	2.88	1.84	1.51	1.04	.35	1.67	18.13
52	.19	.93	.77	.40	1.18	1.11	.13	.78	.19	.12	.75	.09	6.64
53	.19	.61	.48	2.02	6.55	5.19	TRACE	1.40	1.06	.18	.08	1.04	18.80
54	.58	.45	.75	.64	.78	4.82	.72	1.96	1.82	1.72	.08	.02	14.34
55	1.11	1.21	1.52	2.52	4.02	1.12	3.75	.06	.10	.61	2.01	.86	18.89
56	.63	.21	.23	.68	1.44	2.22	1.19	1.20	.23	.75	.19	.58	9.56
57	1.38	.58	.47	.62	2.60	3.10	.49	1.07	1.31	.92	.38	.12	13.04
58	.32	1.65	.56	.52	1.34	4.63	2.26	.61	.15	.39	.63	1.01	14.07
59	.82	.53	.24	.67	3.26	2.38	.21	.60	1.55	1.08	3.93	.25	15.52
60	.20	.42	.09	1.60	2.25	.83	.45	3.74	.40	.05	.67	.10	10.80
61	.10	.33	.67	.84	1.61	.33	1.32	.24	1.58	.24	.79	.20	8.25
62	1.51	.47	.46	.52	5.31	2.70	1.45	1.70	.40	1.54	.28	.71	17.05
63	.81	.21	.36	1.03	1.70	3.21	.94	.42	.49	1.15	.17	.88	11.37
64	.40	.35	1.64	1.70	5.17	4.76	1.59	1.45	.39	TRACE	.70	.87	19.02
65	1.10	1.03	.45	1.57	1.43	5.19	1.77	1.95	1.92	TRACE	1.04	.66	18.11
66	1.71	.82	1.07	.91	1.21	2.38	1.31	1.67	.32	1.72	1.48	.83	15.43
67	.72	.48	2.49	2.21	1.88	3.42	1.53	.24	2.71	1.63	.49	1.72	19.52
68	1.16	.25	.83	1.32	2.88	3.32	.12	2.76	3.41	.04	.87	1.31	18.27
69	1.46	.35	.61	.30	1.48	4.79	1.37	.20	.18	1.03	.13	.50	12.40
70	.96	1.30	.62	.92	4.43	4.26	1.27	.49	.32	.66	.41	.42	16.30
71	.75	.46	.71	.44	2.59	.82	.35	1.50	1.60	.48	.13	.73	10.56
72	.89	.31	.62	.60	2.20	.24	1.96	1.56	.78	.71	.20	1.21	11.28
73	.09	.20	.26	2.87	1.04	1.35	.09	.99	1.41	.88	.86	1.32	11.36
74	.40	.12	.69	.63	4.33	1.74	.68	4.89	1.01	.43	.20	.19	15.31
MEAN													
S. D.													
TOTAL OBS.													

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES
MONTHLY PRECIPITATION

(FROM DAILY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 45-77
STATION - STATION NAME

YEARS

TOTAL MONTHLY PRECIPITATION IN INCHES

[illegible]

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
SNOWFALL
(FROM DAILY OBSERVATIONS)

24112 MALMSTRUM AFB MT/GREAT FALLS 46-77
STATION STATION NAME YEARS

PRECIP.	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	.01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	50.9	23.5	9.7	10.1	2.6	1.5	.7	.8	.2					25.6	992	8.8	23.4	.9
FEB	56.6	21.3	8.5	9.5	1.9	1.0	.6	.3	.2					22.0	904	6.2	21.5	.1
MAR	56.9	20.5	8.2	8.8	2.7	1.8	.5	.8	.1					22.7	992	7.8	21.8	1.2
APR	68.4	15.3	6.4	5.6	1.9	1.0	.3	.6	.3	.1				16.3	960	6.4	20.6	TRACE
MAY	91.7	5.4	1.3	.8	.5	.2								2.8	992	.8	5.0	.0
JUN	99.0	.6		.2	.1		.1							.4	960	.2	4.5	.0
JUL	99.8	.2													992	TRACE	TRACE	.0
AUG	99.8	.2													992	TRACE	TRACE	.0
SEP	93.3	4.3	.7	.8	.3	.4		.1						2.4	960	1.0	10.0	.0
OCT	84.4	9.1	1.9	2.6	1.1	.3	.3	.2	.1					6.6	992	2.6	13.3	.0
NOV	68.4	15.0	4.7	6.9	2.4	1.5	.4	.5	.2					16.6	960	6.5	18.1	TRACE
DEC	60.2	18.6	7.8	6.9	3.5	2.0	.8	.1						21.1	961	7.4	18.3	.1
ANNUAL	77.4	11.2	4.1	4.3	1.4	.8	.3	.3	.1	.0				11.4	11657	47.7	X	X

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES

SNOWFALL

(FROM DAILY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 46-77

STATION

STATION NAME

YEARS

24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
46	2.2	.9	3.5	.1	TRACE	.0	.0	.0	.0	1.4	6.5	1.7	6.5
47	3.1	2.7	7.2	.9	.0	.0	.0	.0	1.7	.2	2.3	2.3	7.2
48	1.4	.9	2.0	2.0	.4	.0	TRACE	.0	TRACE	3.9	1.9	2.4	3.9
49	3.8	3.1	3.6	TRACE	1.9	TRACE	.0	.0	TRACE	4.0	TRACE	3.0	4.0
50	2.8	.1	4.6	3.4	1.4	4.0	.0	.0	2.7	TRACE	3.2	1.3	4.6
51	2.8	9.8	4.3	1.3	1.0	1.0	.0	.0	.3	1.8	1.9	3.0	9.8
52	.8	3.7	2.6	.2	.0	.0	.0	.0	.0	.0	1.8	.9	3.7
53	.5	3.2	1.5	1.4	1.3	.0	.0	.0	.0	.0	TRACE	3.5	3.5
54	1.3	1.8	1.5	1.8	.3	TRACE	.0	.0	6.3	7.7	.7	.2	7.7
55	8.0	3.6	2.9	7.6	2.4	.0	.0	.0	TRACE	.8	5.8	3.4	8.0
56	2.6	.8	1.2	2.4	2.6	.0	.0	TRACE	TRACE	1.5	.7	3.1	3.1
57	3.7	2.5	.5	3.9	.0	.0	.0	.0	.5	1.6	1.0	.1	3.9
58	1.1	8.1	2.8	1.0	.0	.0	.0	.0	TRACE	.1	2.6	4.4	8.1
59	5.7	6.0	1.8	1.9	TRACE	.0	.0	.0	.8	3.3	9.5	3.5	9.5
60	.9	2.9	.6	5.5	2.4	.0	.0	.0	.0	TRACE	3.4	1.0	5.5
61	.8	.2	5.5	1.7	TRACE	.0	.0	.0	.1	.1	4.6	1.5	5.5
62	4.6	3.0	1.9	TRACE	TRACE	.0	.0	.0	1.6	.0	1.8	1.8	4.6
63	2.3	1.3	3.1	4.3	TRACE	.0	.0	.0	.0	.0	1.0	3.0	4.3
64	6.1	2.0	3.3	2.5	TRACE	.0	.0	.0	TRACE	TRACE	1.7	3.8	6.1
65	6.4	2.3	.9	2.3	.1	TRACE	.0	.0	2.1	.0	5.0	3.0	6.4
66	5.9	3.1	5.4	1.4	TRACE	.0	.0	TRACE	.0	2.2	3.1	3.0	5.9
67	3.6	1.3	6.3	7.0	3.3	.0	.0	.0	.0	.6	4.9	3.8	7.0
68	3.7	.5	5.6	6.3	.2	.0	.0	.0	3.4	.1	3.4	6.0	6.3
69	7.0	1.6	3.0	1.1	TRACE	2.2	.0	.0	.0	1.6	.5	3.2	7.0
70	2.5	3.9	2.4	9.6	1.4	.0	.0	.0	1.2	1.6	2.5	2.1	9.6
71	3.7	1.6	1.7	1.8	TRACE	.0	.0	.0	TRACE	2.2	1.6	2.8	3.7
72	5.2	5.0	3.6	2.1	TRACE	.0	TRACE	.0	.8	3.6	4.1	3.6	5.2
73	.9	.5	.6	14.5	TRACE	.0	.0	.0	3.2	1.6	5.3	3.5	14.5
74	4.6	.6	1.6	.9	TRACE	.0	.0	.0	.4	.5	TRACE	1.4	4.6
75	3.3	1.4	5.6	5.5	TRACE	.0	.0	.0	.0	5.9	1.7	.7	5.9
MEAN													
S. D.													
TOTAL OBS.													

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

EXTREME VALUES

SNOWFALL

24112 MALMSTROM AFB MT/GREAT FALLS 46-77
STATION - STATION NAME

<div>MONTH YEAR</div>	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
76	1.1	1.9	5.5	4.6	TRACE	TRACE	.0	.0	.0	.3	4.0	2.9	5.5
77	2.4	.7	2.5	1.1	1.6	.0	.0	.0	.0	3.4	2.5		
MEAN	3.28	2.53	3.10	3.13	.63	.23	TRACE	TRACE	.78	1.56	2.78	2.58	6.16
S. D.	2.027	2.201	1.826	3.171	.973	.808	.000	.000	1.416	1.895	2.144	1.298	2.412
TOTAL OBS.	992	904	992	960	992	960	992	992	960	992	960	961	11637

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 9-88-5 (OLA)

DATA PROCESSING BRANCH
USAF/ETAC/DL A
AIR WEATHER SERVICE/MAC

~~EXTREME VALUES~~
MONTHLY SNOWFALL

(FROM DAILY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 46-77
STATION STATION NAME YEARS

TOTAL MONTHLY SNOWFALL IN INCHES

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
46	3.0	2.6	4.5	.1	TRACE	.0	.0	.0	.0	4.7	10.3	4.1	29.3
47	5.4	7.9	11.6	1.2	.0	.0	.0	.0	2.4	.2	11.7	6.1	46.5
48	6.0	3.4	9.5	3.3	.4	.0	TRACE	.0	TRACE	3.9	3.3	6.0	35.8
49	11.4	7.3	9.1	TRACE	2.0	TRACE	.0	.0	TRACE	4.6	TRACE	8.3	42.7
50	9.1	.1	18.8	5.9	1.6	4.5	.0	.0	2.7	TRACE	9.3	1.4	53.4
51	4.3	12.2	16.5	2.2	1.5	1.0	.0	.0	.3	4.4	3.4	18.3	64.1
52	1.9	9.8	6.9	.2	.0	.0	.0	.0	.0	.0	7.5	.9	27.2
53	1.4	6.1	3.1	3.0	1.3	.0	.0	.0	.0	.0	TRACE	10.5	25.4
54	7.4	1.8	8.3	6.1	.3	TRACE	.0	.0	10.0	8.9	.7	.2	43.7
55	9.0	12.6	15.3	19.0	3.8	.0	.0	.0	TRACE	.8	18.1	8.3	86.9
56	6.0	2.1	2.3	5.6	5.0	.0	.0	TRACE	TRACE	2.2	1.4	8.3	32.9
57	16.3	6.1	2.0	6.4	.0	.0	.0	.0	.5	6.1	3.3	.1	40.8
58	1.7	21.5	6.3	1.6	.0	.0	.0	.0	TRACE	.1	7.8	14.2	53.2
59	20.5	13.7	3.6	3.9	TRACE	.0	.0	.0	.9	7.1	15.4	3.8	68.9
60	3.5	6.2	1.2	12.8	2.4	.0	.0	.0	.0	TRACE	10.6	3.1	39.8
61	1.5	.2	5.5	2.7	TRACE	.0	.0	.0	.1	.1	14.2	3.4	27.7
62	14.6	6.4	3.6	TRACE	TRACE	.0	.0	.0	1.6	.0	1.8	3.4	31.4
63	8.4	2.1	3.6	8.6	TRACE	.0	.0	.0	.0	.0	1.1	8.8	32.6
64	6.2	3.4	10.4	7.4	TRACE	.0	.0	.0	TRACE	TRACE	6.2	10.1	43.7
65	9.4	11.5	5.1	8.8	.1	TRACE	.0	.0	2.9	.0	8.5	7.4	53.7
66	16.8	7.7	10.7	4.0	TRACE	.0	.0	TRACE	.0	2.7	16.0	8.6	66.5
67	8.2	4.8	21.8	20.6	3.8	.0	.0	.0	.0	.6	8.4	17.2	85.4
68	11.5	1.7	9.4	8.5	.2	.0	.0	.0	3.4	.1	4.1	18.0	56.9
69	23.4	4.0	6.6	1.1	TRACE	2.2	.0	.0	.0	4.1	.7	5.4	48.3
70	8.9	15.2	5.5	17.4	2.2	.0	.0	.0	1.8	3.3	6.6	6.9	67.8
71	16.4	7.0	6.8	2.0	TRACE	.0	.0	.0	TRACE	4.8	2.1	11.4	50.5
72	17.6	6.7	9.4	2.2	TRACE	.0	TRACE	.0	.8	6.3	4.7	11.6	59.3
73	.9	2.1	1.7	20.5	TRACE	.0	.0	.0	3.9	1.7	15.1	9.1	55.0
74	10.4	1.7	5.4	2.1	TRACE	.0	.0	.0	.4	.7	TRACE	2.7	23.4
75	10.7	4.7	12.9	16.4	TRACE	.0	.0	.0	.0	13.3	6.5	2.2	64.7
MEAN													
S. D.													
TOTAL OBS.													

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

2

(FROM DAILY OBSERVATIONS)

YEARS

[illegible]

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
SNOW DEPTH
(FROM DAILY OBSERVATIONS)

24112 MALMSTRÖM AFB MT/GREAT FALLS

45-77

STATION

STATION NAME

YEARS

PRECIP.	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	.01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	34.3	12.0	12.2	9.3	7.0	15.5	7.9	1.8	.1					53.7	992			
FEB	49.0	11.8	9.4	7.1	6.1	11.6	4.3	.7						39.2	904			
MAR	57.6	9.8	7.2	5.6	5.7	10.9	2.7	.5						32.7	992			
APR	84.3	6.0	3.9	1.5	1.1	1.9	.9	.4						9.7	960			
MAY	98.2	1.2	.3	.2	.1									.6	992			
JUN	99.8			.1		.1								.2	960			
JUL	100.0														992			
AUG	100.0														992			
SEP	98.3	.8	.5	.3										.8	960			
OCT	92.7	3.5	1.5	1.2	.8	.4								4.1	992			
NOV	68.9	8.2	6.0	4.7	3.4	6.9	1.9							22.9	960			
DEC	48.0	10.2	9.6	9.2	6.9	9.4	6.6	.3						41.8	992			
ANNUAL	77.6	5.3	4.2	3.3	2.6	4.7	2.0	.3	.0					17.1	11689			

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES

SNOW DEPTH

(FROM DAILY OBSERVATIONS)

24112 MALMSTRÖM AFB MT/GREAT FALLS 45-77

STATION

STATION NAME

YEARS

DAILY SNOW DEPTH IN INCHES

MONTH YEAR	JAN	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP	OCT.	NOV.	DEC	ALL MONTHS
45												16	
46	2	2	0	0	0	0	0	0	0	2	7	6	7
47	3	4	5	1	0	0	0	0	TRACE	TRACE	4	2	5
48	5	2	4	2	TRACE	0	0	0	0	0	1	2	5
49	27	7	6	TRACE	2	0	0	0	1	5	0	6	27
50	6	3	8	2	TRACE	4	0	0	2	3	4	4	8
51	3	10	15	1	TRACE	0	0	0	TRACE	3	3	11	15
52	10	7	7	TRACE	0	0	0	0	0	0	7	6	10
53	1	2	6	TRACE	TRACE	0	0	0	0	0	TRACE	4	6
54	9	2	4	2	1	0	0	0	1	2	1	TRACE	9
55	8	4	6	13	2	0	0	0	0	TRACE	7	7	13
56	3	3	1	1	3	0	0	0	0	1	1	4	4
57	7	9	2	1	0	0	0	0	1	3	4	TRACE	9
58	1	11	8	TRACE	0	0	0	0	0	TRACE	4	9	11
59	8	17	2	1	0	0	0	0	0	3	11	2	17
60	5	5	4	8	0	0	0	0	0	0	6	3	8
61	2	TRACE	4	2	0	0	0	0	0	1	7	3	7
62	10	3	3	TRACE	0	0	0	0	0	0	2	4	10
63	7	7	TRACE	5	0	0	0	0	0	0	1	7	7
64	6	2	4	4	0	0	0	0	0	0	6	9	9
65	7	5	5	3	0	0	0	0	2	0	5	3	7
66	12	4	6	1	0	0	0	0	0	0	8	7	12
67	4	1	7	7	1	0	0	0	0	0	5	8	8
68	9	3	7	5	0	0	0	0	2	0	0	10	10
69	18	14	8	0	0	2	0	0	0	2	1	4	18
70	5	5	9	7	0	0	0	0	1	3	2	4	9
71	14	3	3	3	0	0	0	0	0	2	2	5	14
72	10	5	4	TRACE	0	0	0	0	TRACE	4	4	6	10
73	3	1	1	17	TRACE	0	0	0	TRACE	TRACE	6	4	17
74	7	4	2	1	0	0	0	0	0	TRACE	0	3	7
MEAN													
S. D.													
TOTAL OBS.													

NOTE * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

USAF ETAC FORM 0-88-3 (OLA)

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART C

SURFACE WINDS

Presented in this part are various tabulations of surface winds as follows:

- *1. Extreme Values - Peak Gusts: Derived from daily observations and presented by individual year and month for the entire period of record available. Speeds are presented in knots, while directions are given in 16 compass points from the beginning of record through June 1968, and in tens of degrees starting in July 1968. The extreme is selected and printed from available peak gusts for each year-month, however an asterisk (*) is printed in the data block if less than 90% (3 or more missing observations) of the peak gusts are available for the month. An ALL MONTHS value is presented when every month of the year has valid observations. Means and standard deviations are also computed when four or more values are present for any column. A total raw count of valid observations is presented for each month and ALL MONTHS.

NOTE: According to Federal Meteorological Handbook No. 1 specifications (formerly Circular N), "peak gust data are recorded only at stations with continuous instantaneous wind-speed recorders."

2. Bivariate percentage frequency tabulations: Derived from hourly observations, these tabulations are a percentage frequency of wind directions to 16 compass points and calm by wind speeds (knots) in increments of Beaufort classifications. Percentages are shown by both directions and speed, and in addition the mean wind speed is given for each direction.

A separate category is provided on the form for variable winds, which are reported in some data sources. In these data where light and variable winds are reported with no directions but with speeds given, the speeds will be summarized in the appropriate groups opposite the column headed VRBL.

- a. Three tables are prepared for ALL WEATHER surface winds, all years combined, by: (1) Annual - all hours combined, (2) By month - all hours combined, and (3) By month - by standard 3-hour groups.
- b. A separate annual table is also presented for surface winds meeting INSTRUMENT CLASS conditions as follows: Ceiling 200 through 1400 feet inclusive with visibility equal to or greater than 1/2 mile, and/or visibility 1/2 through 2-1/2 miles inclusive with ceiling equal to or greater than 200 feet.

NOTE: A percentage frequency of ".0" in these tables represents one or more occurrences amounting to less than ".05" percent.

* Values for means and standard deviations do not include measurements from incomplete months.

DATA PROCESSING BRANCH
USAF/ETAC/DL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES

SURFACE WINDS

(FROM DAILY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 46-77

STATION

STATION NAME

YEARS

DAILY PEAK GUSTS IN KNOTS

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
46			SW *43	NNW*26	W *26	SSW*45	SSW*56	SSW*30	SW *38				
47		WSW*49						WSW 54	WSW 50	SW 45	SW 35		
48		W 61	S 59	SW 43	SW 49	W 37	W 56	SSW 43	SW 45	SSW 45	SSW 49	SSW 54	
49	SW 50	WSW 57	WSW 46	SSW*47	NNW 39	SSW 45	WSW*43	SSW 61	SW 57	NNW 62	WSW 63	W 52	WSW 63
50	WSW 49	NNW 45	WSW 54	WSW 63	W 44	WSW 43	W 50	WSW 44	WSW 42	WSW 50	WSW 49	SW 43	WSW 63
51	W 46	WSW 49	NNW 52	NNW 36	NNW 55	NNE 42	SW 54	WSW 30	WSW 33	S 47	W 48	SW 40	NNW 55
52	WSW 44	WSW 50	NNW 43	WSW*36	W *41	W 51	NNW 58	NNW 43	WSW 41	WSW 43	W 44	WSW 47	NW 58
53	SSW 52	W 48	WSW 49	WSW 42	WSW 53	NNW 39	W 38	WSW 60	W 46	NNW 35	W 43	W 57	WSW 60
54	SW *50												
55													
56													
57											18*	25	11* 14
58	18*	31	11*	13	18*	33	11*	29	11*	24	18/	46	18/ 46
59	22*	23	12*	31	18*	27	22*	28	11*	28	34*	29	18* 25
60	11*	18	11*	33	12*	29	12*	25	11*	21	11*	33	11* 35
61	11*	22	12*	14	12*	17	18*	34	12*	28	11*	40	12* 25
62	11*	31	18*	41	18*	33	18*	30	12*	29	15*	26	11* 39
63	18*	51	11*	24	33*	28	18*	31	12*	23	12*	24	33* 24
64	18*	26	12*	35	11*	36	18/	42	11*	34	12*	30	11* 32
65	18*	41	12*	28	18*	31	11*	28	18*	40	11*	32	33* 26
66	18*	16	11*	26	18*	30	18/	39	22*	35	22*	28	22* 25
67	18*	22	18*	40	12*	46	18*	24	18*	29	22*	28	18* 36
68	11*	43	22*	23	18*	25	18*	33	11*	37	11*	23	34* 50
69	21/	33	22/	38	24/	38	24/	43	30/	39	4/	33	28/ 41
70	24/	50	28/	54	24/	44	26/	48	24/	34	26/	78	24/ 48
71	25/	46	24/	45	27/	44	5/	49	26/	45	26/	36	28/ 38
72	26/	50	24/	55	25/	50	25/	40	22/	37	30/	39	27/ 54
73	25/	38	24/	31	26/	43	28/	40	26/	48	13/	53	26/ 42
74	27/	53	27/	40	25/	54	28/	40	26/	42	2/	36	29/ 44
75	24/	43	24/	36	24/	40	35/	31	26/	35	24/	33	24/ 50
MEAN													
S. D.													
TOTAL OBS.													

NOTES * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-3 (OIA)

* (BASED ON LESS THAN FULL MONTHS AND +100 KNOTS)

EXTREME VALUES

SURFACE WINDS

(FROM DAILY OBSERVATIONS.

24112 MALMSTROM AFB MT/GREAT FALLS 46-77

STATION

STATION NAME

YEARS

[illegible]

NOTES * (BASED ON LESS THAN FULL MONTHS)

\$ (BASED ON LESS THAN FULL MONTHS' AND +100 KNOTS)

USAF ETAC FORM 0-88-5 (OLA)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRUM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEAR MONTH
ALL WEATHER 0000-0200
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.6	1.1	.2								4.0	5.7
NNE	1.0	1.4	1.3	.4	.1							4.2	6.6
NE	1.1	1.5	1.0	1.2								4.7	7.1
ENE	.6	1.2										1.8	3.8
E	.4	.1										.5	3.0
ESE	.1	.1										.2	3.5
SE	.2											.2	2.0
SSE	.4											.4	2.5
S	.9	.6										1.5	3.6
SSW	.6	2.8	1.2	.1	.8	.4						5.9	8.7
SW	1.8	3.5	6.0	6.9	2.8	2.2						23.2	11.7
WSW	1.4	3.0	4.5	6.5	5.8	1.2	.1					22.5	12.6
W	.6	1.5	1.4	2.4	1.2	.1	.1					7.3	11.4
WNW	.4	.6	.5	.3								1.9	6.8
NW	1.0	.8	.6	.4								2.8	5.9
NNW	1.0	1.0	.8	.3								3.0	5.8
VARBL													
CALM												15.7	
	12.7	19.8	18.4	18.7	10.6	3.9	.2					100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 66-77 JAN
STATION STATION NAME YEARS MONTH
ALL WEATHER CLASS 0300-0500
CONDITION HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.1	1.2	.6	.1		.1					3.7	7.8
NNE	.8	1.4	1.6	.3	.1	.2						4.4	7.8
NE	1.3	1.4	.9	.6	.1							4.3	6.2
ENE	.3	.5										.9	3.3
E	.4		.1									.5	3.2
ESE													
SE	.2											.2	2.0
SSE	.3	.2	.1									.6	3.8
S	.8	.2	.2	.1								1.3	4.5
SSW	1.1	2.7	1.2	1.6	1.0	.2						7.7	9.2
SW	1.4	5.6	5.8	6.2	1.6	1.7	.2					22.6	10.8
WSW	.9	3.4	5.2	6.7	3.9	1.8	.1	.1				22.0	12.6
W	.8	2.5	1.7	3.1	.6	.3						9.0	10.0
WNW	.2	.6	.3	.4								1.6	7.3
NW	.1	.6	.5									1.3	6.0
NNW	.5	1.2	1.4	.3								3.4	6.6
VARBL													
CALM												16.3	
	9.6	21.5	20.2	20.1	7.4	4.3	.4	.1				100.0	8.3

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTRQM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	1.5	1.2	.8		.1						4.0	7.8
NNE	1.0	1.9	1.2	.4	.1							4.6	6.5
NE	1.1	1.7	1.0	.5	.1							4.4	6.6
ENE	.2	.4	.3									1.0	5.1
E	.8	.1										.9	2.4
ESE													
SE	.1											.1	3.0
SSE	.2	.4										.6	3.7
S	.8	.5	.4	.2								1.9	5.6
SSW	.5	2.2	1.3	1.0	.5	.1						3.6	8.4
SW	1.6	4.6	6.2	5.2	1.3	1.8	.4					21.2	11.0
WSW	1.1	3.7	4.8	6.9	4.5	2.0	.1	.1				23.2	12.9
W	1.0	1.9	3.2	2.9	1.1	.3						10.4	10.2
WNW	.1	.8	.5	.2								1.6	7.0
NW	.4	1.2	.5	.1	.1							2.4	6.1
NNW	1.1	.9	.5	.1								2.6	4.8
VARBL													
CALM												15.5	
	10.3	21.8	21.3	18.3	7.7	4.4	.5	.1				100.0	8.3

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.3	.9	.5	.1							3.5	6.9
NNE	1.4	2.2	2.2	1.3	.1							7.1	7.3
NE	1.5	1.5	1.3	.2	.1							4.6	5.6
ENE	.6	.9	.4									1.9	4.8
E	.3	.2										.5	3.0
ESE													
SE	.1											.1	2.0
SSE	.4			.1								.5	5.2
S	.2	.9	.1	.1								1.3	4.9
SSW	1.3	1.5	.8	1.2	.9	.3						5.9	9.6
SW	1.4	3.0	4.9	8.3	3.0	1.1	.4	.1				22.3	12.1
WSW	.8	2.6	4.3	7.1	4.3	2.8	1.2					23.0	14.4
W	.5	1.4	2.5	2.6	.6	.1	.2					8.0	10.6
WNW	.4	1.3	.2	.1								2.0	5.2
NW	.3	.5	.6	.3	.1							1.9	7.6
NNW	.6	1.3	.9									2.8	5.6
VARBL													
CALM												14.4	
	10.8	18.5	19.0	21.8	9.2	4.3	1.8	.1				100.0	9.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.0	1.4	1.1	.3	.1						4.7	8.5
NNE	1.2	1.8	1.1	1.0	.1	.1						5.3	7.2
NE	2.2	1.7	1.5	.4								5.8	5.7
ENE	1.1	.8	.2									2.0	3.5
E	.8	.2	.2									1.2	3.6
ESE	.3	.3										.6	3.5
SE		.1										.1	4.0
SSE													
S	.1	.2			.1							.4	7.3
SSW	.9	.2	.3	1.6	1.2	.3						4.5	12.7
SW	1.1	2.4	3.5	6.8	3.4	2.6	.2	.1				20.1	13.6
WSW	.2	1.6	4.2	6.9	5.7	3.4	1.0					23.0	15.7
W	.4	1.3	2.3	3.9	1.7	1.2	.3	.1				11.2	13.6
WNW	.1	1.1	1.4	.5	.1	.1						3.3	8.8
NW	.3	.8	.1	.1	.1							1.4	5.9
NNW	.9	.9	1.0	.2								2.9	5.7
VARBL													
CALM												13.3	
	10.3	14.3	17.2	22.5	12.8	7.8	1.5	.2				100.0	10.3

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTRUM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEARS MONTH
ALL WEATHER 1500-1700
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	2.0	1.1	.8	.2							4.9	7.0
NNE	1.3	1.6	.9	1.3								5.1	7.1
NE	1.6	2.4	1.1	.2	.1							5.4	5.5
ENE	2.0	1.1	.5									3.7	4.0
E	.8	.1										.9	2.4
ESE	.3											.3	2.3
SE	.2	.2	.1									.5	4.2
SSE	.6											.6	2.3
S	.6	1.0	.1	.1								1.8	4.1
SSW	.9	.9	1.3	.9	.2							4.1	7.8
SW	.6	1.5	4.1	6.0	2.7	1.3	.1					16.3	12.7
WSW	.5	2.2	3.9	8.0	4.1	3.0	.6	.1				22.4	14.6
W	.5	1.2	2.9	4.4	2.0	1.1	.2	.1				12.5	13.2
WNW	.3	.4	.8	.5								2.0	8.2
NW	.4	.9	.2	.2	.3							2.0	7.7
NNW	1.0	1.2	.4	.1								2.7	4.8
VARBL													
CALM												14.7	
	12.7	16.6	17.3	22.5	9.7	5.4	1.0	.2				100.0	9.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
1800-2000
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.3	1.5	.5	.1							4.0	7.3
NNE	1.8	1.5	1.0	.6	.3	.1						5.4	6.9
NE	1.3	1.7	1.3	.4								4.7	5.6
ENE	.8	.8	1.2									2.7	5.6
E	.6	.3										1.0	3.0
ESE		.1	.1									.2	6.0
SE	.3	.2										.5	2.8
SSE	.4	.3										.8	3.6
S	1.5	.6	.5	.1	.1							2.9	4.6
SSW	.3	2.3	1.0	1.2	.1		.1					4.9	8.4
SW	1.1	3.2	6.2	4.9	2.5	1.0	.2					19.1	11.2
WSW	.5	2.2	4.8	6.9	4.9	2.2	.5					22.0	13.9
W	.5	2.2	2.8	2.2	1.1	.1	.1	.1				9.0	10.1
WNW	1.0	.5	.3	.1								1.9	4.4
NW	.6	1.1	.1	.1								1.9	4.6
NNW	.8	.4	.5	.1	.3							2.2	7.6
VARBL													
CALM												16.7	
	12.2	18.7	21.4	17.2	9.5	3.3	1.0	.1				100.0	8.2

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONCLUSION
2100-2300
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	.6	1.1	.8	.1	.2						3.9	8.1
NNE	1.7	1.9	1.8	.2	.1							5.8	5.7
NE	1.2	1.8	.9	.8	.2							4.8	6.9
ENE	.6	.9	.2	.3								2.0	5.6
E	.5	.1										.6	2.5
ESE	.1											.1	2.0
SE	.2											.2	3.0
SSE	.6	.1	.1	.1								1.0	3.9
S	1.2	.9	.2	.1								2.4	4.2
SSW	.5	1.7	.9	.6	.6	.3						4.7	9.7
SW	1.7	4.6	5.5	6.0	3.2	1.3	.2					22.6	11.2
WSW	1.0	2.0	5.3	6.5	4.7	2.2	.1					21.7	13.4
W	.9	1.5	2.2	2.3	1.3	.3	.2					8.6	11.3
WNW	.4	.8	.6	.2								2.0	6.6
NW	.5	1.2	.5	.1								2.4	5.5
NNW	.5	.6	.6									1.8	5.5
VARBL													
CALM												15.3	
	12.9	18.8	19.9	18.0	10.3	4.3	.5					100.0	8.5

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MÅLMSTROM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
HOURS (L.G.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.3	1.2	.7	.1	.1	.0					4.1	7.4
NNE	1.3	1.7	1.4	.7	.1	.1						5.2	6.9
NE	1.4	1.7	1.1	.6	.1							4.9	6.1
ENE	.8	.8	.4	.0								2.0	4.5
E	.6	.1	.0									.8	2.9
ESE	.1	.1	.0									.2	3.5
SE	.2	.1	.0									.3	3.1
SSE	.4	.1	.0	.0								.6	3.6
S	.8	.6	.2	.1	.0							1.7	4.6
SSW	.8	1.8	1.0	1.0	.7	.2	.0					5.4	9.3
SW	1.3	3.6	5.3	6.3	2.6	1.6	.2	.0				20.9	11.7
WSW	.8	2.6	4.6	6.9	4.7	2.3	.5	.0				22.5	13.8
W	.7	1.7	2.4	3.0	1.2	.4	.1	.0				9.5	11.4
WNW	.4	.8	.6	.3	.0	.0						2.1	6.9
NW	.5	.9	.4	.2	.1							2.0	6.2
NNW	.8	.9	.8	.1	.0							2.7	5.8
VARBL													
CALM												15.2	
	11.4	18.7	19.3	19.9	9.7	4.7	.9	.1				100.0	8.7

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTRÖM AFB MT/GREAT FALLS 68-77 FEB
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0000-0200
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.6	.5	.5								2.2	6.5
NNE	.6	1.5	.9	.2								3.3	6.0
NE	1.1	1.5	.6	.1	.1							3.4	5.6
ENE	.4	.6	.1									1.1	4.6
E	.2		.2	.1								.6	7.2
ESE													
SE	.4											.4	2.3
SSE	.1	.2										.4	3.7
S	1.2	.9										2.1	3.4
SSW	1.1	1.6	1.9	.7	.6	.1						6.0	8.3
SW	2.4	4.9	8.8	8.0	1.1	.9						26.1	9.7
WSW	.7	3.5	5.2	6.9	3.1	1.3	.2					21.0	11.9
W	1.1	2.1	2.1	2.8	.6	.2						9.0	9.4
WNW	.4	.4	.6	.1								1.4	6.1
NW	.1	.4	.8									1.3	7.4
NNW	.5	.1	.9	.2	.1							1.9	8.0
VARBL													
CALM												19.9	
	10.7	18.5	22.7	19.8	5.5	2.6	.2					100.0	7.4

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

0300-0500

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.9	.1	.1	.1							1.8	5.7
NNE	.4	1.3	1.4	.8								3.9	8.0
NE	.5	.8	.4	.2								1.9	5.4
ENE	.6	.5	.2									1.3	4.0
E	.4	.1										.5	3.0
ESE	.1											.1	3.0
SE	.1											.1	2.0
SSE	.2	.2		.1								.6	5.0
S	.6	.9	.4									1.9	4.6
SSW	2.1	1.6	1.6	1.4	.1							6.9	6.9
SW	2.6	3.9	10.2	7.8	1.8	.2	.2					26.7	9.8
WSW	.8	3.5	4.9	6.5	3.2	.7	.4					20.0	11.7
W	1.3	2.7	2.2	2.5	1.2	.2						10.1	9.5
WNW	.9	.7	.6	.2								2.5	5.8
NW	.5	.7	.8	.2								2.2	6.6
NNW	.1	.9	.1	.1	.1							1.4	6.8
VARBL													
CALM												18.0	
	11.7	19.0	23.1	20.0	6.5	1.2	.6					100.0	7.5

TOTAL NUMBER OF OBSERVATIONS

849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALNSTRUM AFB MT/GREAT FALLS

68-77

FEB

STATION NAME

YEARS

MONTH

ALL WEATHER

0600-1800

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.9	.5	.1								2.0	5.5
NNE	.7	.9	.6	1.1								3.3	7.9
NE	.5	1.5	.4	.5								2.8	6.3
ENE		.4	.1									.5	5.8
E	.1	.2										.4	4.3
ESE			.1									.1	7.0
SE	.1	.1										.2	3.5
SSE	.2	.4										.6	3.6
S	.9	.9	.7	.2								2.8	5.4
SSW	1.1	2.2	1.3	1.9	.9	.1						7.5	9.2
SW	2.1	4.6	8.0	8.0	.9	.4						24.0	9.5
WSW	2.1	3.1	5.8	6.6	2.1	.7						20.4	10.1
W	1.4	3.7	3.1	2.4	.4	.1						11.0	.2
WNW	.2	.6	.4	.5								1.6	6.8
NW	1.1	.5	.5	.1	.2	.1						2.5	7.1
NNW	.6	.6	.2	.1								1.5	5.1
VARBL													
CALM												18.7	
	11.7	20.6	21.6	21.4	4.6	1.4						100.0	7.2

TOTAL NUMBER OF OBSERVATIONS

849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.1	.7	.6	.1							2.9	7.7
NNE	1.3	1.3	1.1	1.1								4.7	6.9
NE	.5	1.3	.8	.9								3.5	7.7
ENE	.8	1.1	.4	.2								2.5	5.2
E	.2	.1										.4	3.7
ESE		.1										.1	4.0
SE	.1	.1										.2	3.5
SSE	.5	.2										.7	3.7
S	.1	.4	.5	.1	.2							1.3	9.2
SSW	.8	.2	.8	1.2	1.1							4.1	11.7
SW	1.5	1.9	4.8	10.5	3.4	1.1	.4	.1				23.7	12.7
WSW	1.1	2.0	6.7	8.5	3.6	1.5	.5					22.9	12.6
W	1.8	1.9	2.2	2.6	1.1	.9	.2					10.7	11.1
WNW	.7	.5	.7	.4	.1							2.4	7.0
NW	.6	.5	.5									1.5	5.2
NNW	.4	.8	.7	.1	.1							2.1	6.6
VARBL													
CALM												16.3	
	10.5	13.4	19.9	26.1	8.7	3.5	1.1	.1				100.0	9.1

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALNSTRUM AFB MT/GREAT FALLS 68-77 FEB
STATION STATION NAME YEARS NORTH
ALL WEATHER
CLASS
CONDITION
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.5	1.9	.5								4.7	6.8
NNE	.9	2.1	1.8	.9								5.8	6.6
NE	.9	2.4	1.6	.5								5.4	6.5
ENE	1.1	1.4	.1	.1	.1							2.8	4.9
E	1.2	.6	.2									2.0	3.9
ESE			.1									.1	9.0
SE	.1		.2									.4	6.7
SSE	.1											.1	2.0
S	.2	.1	.4	.1								.8	6.3
SSW	.4	.8	.7	1.8	.8	.4	.1					4.9	12.3
SW	.2	.9	3.8	8.4	3.3	1.6	.4					18.6	14.2
WSW	.6	2.0	3.4	7.7	5.2	2.7	.9	.2				22.7	15.3
W	.5	1.1	3.4	4.0	1.9	1.	.2	.1				12.8	14.0
WNW	.4	.9	.9	.7	.5	.4	.1					3.9	11.3
NW	.2	.8	.5	.2	.1	.1						2.0	8.6
NNW	1.3	1.1	1.1	.5								3.9	6.2
VARBL													
CALM												9.0	
	9.0	15.8	20.1	25.3	11.9	6.8	1.8	.4				100.0	10.7

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/HAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

1500-1700

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	2.6	1.2	.8								6.1	5.9
NNE	.8	3.3	1.3	.5	.2							6.1	6.5
NE	1.3	3.5	2.4	.9								8.1	6.2
ENE	1.3	2.0	.2									3.5	4.2
E	1.6	.8		.1								2.6	3.7
ESE		.1	.4									.5	7.0
SE		.1	.1									.2	8.0
SSE	.1											.1	2.0
S	.5	.5	.4	.4	.1							1.8	7.4
SSW	.4	.7	1.4	1.2	.5							4.1	9.9
SW	.8	2.2	6.8	5.3	3.3	.6						19.1	11.7
WSW	.2	.9	4.2	8.0	3.2	1.6	.2	.1				18.6	14.1
W	.2	.8	2.4	2.9	2.1	1.4	.1					10.0	14.3
WNW	.1	1.3	.7	.9	.9	.1						4.1	11.6
NW	.5	.9	.5	.7		.1						2.7	8.1
NNW	.8	1.4	1.3	.9								4.5	7.5
VARBL													
CALM												7.8	
	10.2	21.3	23.2	22.7	10.4	3.9	.4	.1				100.0	9.4

TOTAL NUMBER OF OBSERVATIONS

849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

1800-2000
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	1.4	1.2	.2								4.4	5.0
NNE	1.8	2.2	1.9	.4	.1							6.4	5.9
NE	1.1	1.9	1.9	.6								5.4	6.3
ENE	.7	1.3										2.0	3.9
E	.5	.4										.8	3.3
ESE	.2											.2	3.0
SE	.1	.1	.1	.1								.5	7.0
SSE	.5	.2	.1									.8	3.9
S	.5	2.0	.6	.2	.1							3.4	5.8
SSW	1.2	4.2	2.7	1.5	.1							9.8	7.2
SW	.6	3.3	6.2	4.5	.8	.7	.1					16.3	10.4
WSW	.4	2.1	4.1	6.1	2.6	.2						15.5	11.8
W	.9	1.3	3.7	4.1	.2	.1						10.4	10.0
WNW	.7	1.3	1.1	.4								3.4	6.6
NW	.7	1.1	.7	.4								2.8	6.3
NNW	.2	.4	.1	.8								1.5	9.7
VARNL													
CALM												16.4	
	11.5	23.2	24.4	19.3	4.0	1.1	.1					100.0	7.1

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.4	1.2	.6	.2							2.7	9.5
NNE	1.3	1.6	1.3	.2								4.5	5.7
NE	1.4	1.4	.8	.4								4.0	5.4
ENE	.5		.1									.6	4.0
E	.1		.1									.2	6.0
ESE	.2		.1									.4	4.3
SE		.1	.1									.2	6.0
SSE	.2	.2	.2									.7	4.8
S	.8	1.6	.5	.2	.1							3.3	5.7
SSW	1.3	2.9	2.6	1.4	.6	.1						9.0	8.1
SW	.7	4.6	9.4	5.1	2.0	.4						22.1	9.9
WSW	.8	3.3	5.5	6.8	1.3	.6						18.4	10.8
W	.9	2.6	1.9	2.6	.5	.1						8.6	8.9
WNW	.7	.7	.6	.1	.1							2.2	6.1
NW	.4	.8	1.1	.2								2.5	6.8
NNW	.6		.5	.1								1.2	6.5
VARBL													
CALM												19.4	
	10.4	20.4	26.0	17.8	4.8	1.2						100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

849

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112 MARMSTROM AFB MT/GREAT FALLS 8-77
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
FEB
MONTH
ALL
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.2	.9	.4	.1							3.4	6.5
NNE	1.0	1.8	1.3	.6	.0							4.7	6.6
NE	.9	1.8	1.1	.5	.0							4.3	6.2
ENE	.7	.9	.2	.0	.0							1.8	4.5
E	.5	.3	.1	.0								.9	4.0
ESE	.1	.0	.1									.2	5.4
SE	.1	.1	.1	.0								.3	5.2
SSE	.3	.2	.0	.0								.5	4.0
S	.6	.9	.4	.2	.1							2.2	5.7
SSW	1.0	1.8	1.6	1.4	.6	.1	.0					6.6	8.8
SW	1.4	3.3	7.3	7.2	2.1	.7	.1	.0				22.1	10.9
WSW	.8	2.6	5.0	7.1	2.9	1.2	.3	.0				19.9	12.4
W	1.0	2.0	2.6	3.0	1.0	.6	.1	.0				10.3	10.8
WNW	.5	.8	.7	.4	.2	.1	.0					2.7	8.3
NW	.5	.7	.7	.2	.0	.0						2.2	7.1
NNW	.6	.7	.6	.4	.0							2.3	7.0
VARBL													
CALM												15.7	
	10.7	19.0	22.6	21.6	7.1	2.7	.5	.1				100.0	8.2

TOTAL NUMBER OF OBSERVATIONS 6792

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTROM AFB MT/GREAT FALLS 64-77 MAR
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
0000-0200
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.9	1.0	.6		.1						3.3	7.9
NNE	1.1	1.4	1.0	.6								4.1	6.1
NE	.2	1.6	.6	.2								2.7	6.4
ENE	.3	.5										.9	4.1
E	.2	.1	.1									.4	4.5
ESE		.2										.2	4.0
SE	.2	.5										.8	3.7
SSE	.2	.4	.1									.8	4.4
S	.8	1.5	.5									2.8	5.2
SSW	1.6	4.3	1.5	1.5	.1							9.0	6.5
SW	1.8	6.6	8.8	5.4	.6							23.2	8.5
WSW	1.3	4.7	5.3	7.7	1.7	.8	.1					21.6	10.6
W	.6	2.3	2.6	1.2	.2	.1						7.0	8.0
WNW	.2	.9	.4	.1								1.6	6.2
NW	.5	.4	1.0	.2								2.2	6.6
NNW	.5	.8	.4	.2	.2	.2						2.4	9.2
VARBL													
CALM												17.1	
	10.4	27.1	23.3	17.8	2.9	1.2	.1					100.0	6.8

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAR
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.3	1.0	1.0	.3	.2	.1						2.9	8.4
NNE	.9	1.9	1.0	.5								4.3	6.2
NE	.6	.4	.6	.3								2.0	6.4
ENE	.9	.2										1.1	2.6
E	.1	.2										.3	3.3
ESE													
SE	.1	.4		.1								.6	5.8
SSE	1.0	.3	.1									1.4	3.3
S	1.4	.8	.5	.3								3.0	5.1
SSW	1.4	4.0	1.7	.6								7.7	6.1
SW	2.3	6.8	8.4	4.8	1.1	.1						23.4	8.5
WSW	1.4	3.3	7.7	6.3	1.9	.8						21.5	10.2
W	1.2	1.8	2.4	1.4	.6		.1					7.5	8.5
WNW	.8	1.1	.5	.4								2.8	6.0
NW	.1	.8	.5	.1								1.5	7.1
NNW	.6	.3	.5	.4		.2						2.2	8.5
VARBL													
CAIM												17.6	
	13.6	23.3	25.1	15.8	3.9	1.2	.1					100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

0600-0800

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.6	.8	.8	.4							3.0	9.6
NNE	.8	1.7	1.3	.5	.2							4.5	7.5
NE	.6	1.1	.8	.2								2.7	5.8
ENE	1.0	.4	.1									1.5	3.4
E	.1	.4										.5	4.0
ESE	.1											.1	2.0
SE	.1											.1	2.0
SSE	.2	.1	.1	.1								.5	6.0
S	1.2	1.1	.8	.3								3.3	5.5
SSW	1.5	3.4	1.8	1.1								7.8	6.6
SW	1.9	5.8	9.9	5.4	1.3	.2						24.5	8.9
WSW	1.2	4.4	8.2	7.6	1.8	.6	.1					24.0	10.4
W	1.0	2.6	1.8	1.0	.1	.2						6.7	7.6
WNW	.3	.9	.4	.4	.1	.2						2.4	9.1
NW	.3	.6	.3	.2								1.5	6.4
NNW	.3	.2	.6	.3								1.5	7.7
VARBL													
CALM												15.3	
	11.1	23.4	26.9	18.0	4.0	1.3	.1					100.0	7.2

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112 MALMSTRUM AFB MT/GREAT FALLS 68-77 MAR
STATION STATION NAME YEARS MONTH
ALL WEATHER 0900-1100
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.5	1.8	2.2	.3							5.7	9.4
NNE	1.3	.9	1.6	.6	.3							4.7	7.3
NE	1.1	.9	1.0	.1								3.0	5.4
ENE	1.2	.8		.1								2.0	3.7
E	.4	.2		.1								.8	4.6
ESE	.1	.1										.2	3.0
SE			.1									.1	7.0
SSE	.3	.1										.4	2.8
S	.4	.2	.2	.1	.1							1.1	7.0
SSW	1.1	1.4	1.2	2.6	1.5	.1						7.8	11.0
SW	.5	2.3	3.3	7.7	4.2	1.0						19.0	13.0
WSW	.5	2.0	3.9	11.9	4.8	2.5	.5					26.2	14.4
W	.3	2.8	2.2	3.3	2.4	1.0	.2					12.2	12.6
WNW	.2	1.1	.9	.5	.1							2.8	8.1
NW	.2	1.2	.9	.1	.1	.1						2.6	7.5
NNW	.3	.6	.6	.3	.2	.1						2.3	8.8
VARBL													
CALM												9.0	
	8.9	15.1	17.6	29.8	14.1	4.7	.8					100.0	10.5

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 66-77 MAR
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
1200-1400
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.8	1.3	3.3	.5							6.7	10.9
NNE	.1	2.0	1.8	.9	.2							5.1	8.1
NE	1.2	1.9	1.5	.8								5.4	8.6
ENE	.6	1.2	.2	.1								2.2	4.7
E	.6	.2	.1									1.0	3.3
ESE	.1	.2										.3	4.0
SE	.2											.2	4.0
SSE	.3	.2	.2									.8	5.0
S	.3	.4	.3	.1	.3							1.5	8.1
SSW	.1	.8	1.0	1.8	.9	.3						4.8	12.6
SW	.2	1.0	4.3	4.7	4.3	1.2	.2					15.9	14.0
WSW	.4	1.7	3.1	6.3	6.6	3.7	.6	.2				22.7	16.0
W	.3	1.4	2.3	4.3	2.6	3.0	.2					14.1	14.8
WNW	.5	.8	1.9	1.6	.5							5.4	9.8
NW	.6	.6	1.3	.5	.3	.1						3.5	9.0
NNW	.3	1.0	1.8	1.8	.3							5.3	9.9
VARBL													
CALM												5.3	
	6.9	14.2	21.2	26.3	16.6	8.3	1.1	.2				100.0	11.7

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 MAR
STATION STATION NAME YEARS NORTH
ALL WEATHER 1500-1700
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.5	2.0	2.3	1.0	.1						8.2	9.7
NNE	1.3	1.9	1.8	2.0	.4	.1						7.6	8.4
NE	.8	1.8	2.6	.4								5.6	6.7
ENE	.4	1.6	.5	.1								2.7	5.7
E	.3	.5	.5									1.4	5.6
ESE	.2		.2									.4	6.0
SE	.3	.1	.4	.1								1.0	6.4
SSE	.2	.1	.4	.1								.9	6.6
S	.4	.3	.6	1.0	.1							2.5	9.0
SSW	.3	1.4	1.9	1.8	.8							6.2	10.3
SW	.5	1.7	1.8	5.8	2.2	.8						12.8	12.8
WSW	.2	1.1	2.9	7.5	4.0	2.2	.6	.1				18.6	15.4
W	.3	.8	2.3	4.0	3.8	2.4						13.4	15.4
WNW	.2	.3	1.6	1.4	.8	.3						4.6	12.0
NW	1.1	.6	1.7	1.5	.2							5.2	8.4
NNW	.4	1.4	1.3	1.1	.2							4.4	8.5
VARBL													
CALM												4.5	
	8.4	15.3	22.8	29.1	13.3	5.8	.6	.1				100.0	11.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 MAR
STATION STATION NAME YEARS MONTH
ALL WEATHER 1800-2000
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	2.0	1.8	1.7	.4	.1						6.8	9.1
NNE	1.1	2.6	1.9	1.3	.3							7.2	7.7
NE	1.6	2.2	1.5	.1								5.4	5.4
ENE	.8	.8	.2	.1								1.8	4.6
E	.8	.3										1.1	3.0
ESE	.2	.3										.5	3.8
SE	.2	.1	.1									.4	4.5
SSE	.4	.3		.1								.9	4.6
S	1.6	2.2	1.5	.6								5.9	6.0
SSW	.8	3.8	3.3	.8	.2							8.8	7.1
SW	.5	4.1	3.8	3.2	.9	.5						13.0	9.7
WSW	.3	1.7	5.1	6.8	.9	.2	.2					15.2	11.3
W	.2	1.4	4.0	5.6	1.7	.3		.1				13.3	11.9
WNW	.5	.3	.9	.8								2.5	8.2
NW	.1	.3	.4									.9	6.0
NNW	.8	1.6	.9	1.0	.3							4.5	7.7
VARBL													
CALM												11.8	
	10.5	24.0	25.4	22.0	4.7	1.2	.2	.1				100.0	7.8

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRON AFB MT/GREAT FALLS 68-77 MAR
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
2100-2300
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.4	.9	.9	.2	.1						4.0	8.3
NNE	1.1	1.3	1.6	1.0	.3							5.3	7.7
NE	.6	2.2	1.3	.3								4.4	6.1
ENE	.2	.6										.9	4.4
E													
ESE	.1		.1									.2	6.0
SE	.1	1.3	.2	.1								1.7	5.7
SSE	.2	.6	.2									1.1	4.9
S	1.6	2.9	1.6	.2								6.3	5.2
SSW	.8	4.7	2.0	.6	.4							8.6	6.8
SW	1.0	5.5	7.8	2.9	1.0	.1						18.3	8.5
WSW	.4	2.5	6.3	8.1	.9	.4	.2					18.8	10.9
W	.8	2.0	3.2	2.7	.2							8.9	9.0
WNW	.2	.6	.4	.4								1.7	6.9
NW	.4	.6	.6	.1								1.8	6.0
NNW	.6	1.0	1.2	.3	.2							3.3	7.3
VARBL													
CALM												14.6	
	8.7	27.3	27.6	17.6	3.2	.6	.2					100.0	7.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRUM AFB MT/GREAT FALLS 68-77 MAR
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
NORTH
ALL
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.1	1.3	1.5	.4	.1						5.1	9.4
NNE	.9	1.7	1.5	.9	.2	.0						5.3	7.5
NE	.8	1.5	1.2	.3								3.9	6.1
ENE	.7	.8	.1	.1								1.6	4.4
E	.3	.3	.1	.0								.7	4.2
ESE	.1	.1	.0									.3	4.4
SE	.2	.3	.1	.0								.6	5.2
SSE	.4	.3	.1	.0								.8	4.7
S	1.0	1.2	.8	.3	.1							3.3	6.0
SSW	.9	3.0	1.8	1.4	.5	.1						7.6	8.0
SW	1.1	4.2	6.0	5.0	1.9	.5	.0					18.8	10.2
WSW	.7	2.7	5.3	7.8	2.8	1.4	.3	.0				21.1	12.5
W	.6	1.9	2.6	2.9	1.5	.9	.1	.0				10.4	11.8
WNW	.4	.7	.9	.7	.2	.1						3.0	8.9
NW	.4	.7	.8	.3	.1	.0						2.4	7.6
NNW	.5	.9	.9	.7	.2	.1						3.2	8.5
VARBL													
CALM												11.9	
	9.7	21.2	23.7	22.1	7.8	3.0	.4	.1				100.0	8.6

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 APR
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITIO

SPEED (KNTS) DIR.	1 - 3	4 - 5	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.1	1.0	.6	.1							3.4	7.5
NNE	.9	1.3	.7	1.1	.6							4.6	8.4
NE	.7	.6	.9	.9	.3							3.3	9.0
ENE	.4	.4		.3	.2							1.4	8.6
E	.3	.2										.6	3.4
ESE		.7	.1									.8	5.7
SE	.3	.3	1.0									1.7	6.7
SSE	.8	1.0	1.1	.2								3.1	6.0
S	2.2	3.7	1.7	.1								7.7	5.0
SSW	1.6	4.2	2.0	.4								8.2	5.6
SW	2.3	5.6	6.3	2.8	.2	.1						17.3	7.6
WSW	.9	3.9	6.1	5.2	.3	.2						16.7	9.3
W	1.0	2.6	2.6	2.0	.2							8.3	8.3
WNW	.2	.9	1.4	.3								2.9	7.7
NW	.9	.7	.9	.4	.1							3.0	6.7
NNW	.3	.7	.9	.6								2.4	7.9
VARBL													
CALM												14.6	
	13.6	27.8	26.7	15.0	2.1	.3						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 APR
STATION STATION NAME YEARS MONTH
ALL WEATHER CLASS
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.1	1.3	.2	.3							3.7	7.3
NNE	.9	1.3	.9	.7	.3							4.1	7.5
NE	.6	.7	.7	.6	.3							2.8	8.8
ENE	.2	.4	.2	.2	.3							1.4	9.5
E	.2	.8										1.0	3.8
ESE	.2	.3										.6	3.6
SE	.4											.4	2.0
SSE	.8	1.0	.1									1.9	3.8
S	2.0	2.9	.8	.2								5.9	4.6
SSW	2.3	3.4	1.7	.8								8.2	5.6
SW	2.8	5.1	7.3	3.4	.2							18.9	7.6
WSW	1.4	4.8	6.8	3.8	1.2		.1					18.1	8.9
W	.8	2.8	3.1	1.8	.2							8.7	7.9
WNW	.7	1.3	1.1	.3								3.4	6.3
NW	.4	.8	.7	.3								2.2	6.9
NNW	.1	1.0	1.0	.2								2.3	7.0
VARBL													
CALM												16.3	
	14.6	27.8	25.7	12.6	3.0		.1					100.0	6.1

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.3	1.4	.6	.2	.4						4.8	8.9
NNE	.3	1.4	1.1	.8	.3							4.0	8.8
NE	.4	1.2	.8	.4	.1	.2						3.2	8.4
ENE	.1	.1		.1								.3	6.7
E	.3	.2	.1									.7	4.0
ESE	.1		.1	.1								.3	6.7
SE	.3	.3										.7	3.7
SSE	.4	.2	.2									.9	4.3
S	2.3	1.7	.3	.4	.1							4.9	5.2
SSW	1.0	2.1	1.6	1.0	.2							5.9	7.5
SW	2.4	4.7	5.6	4.8	1.0	.4						18.9	9.0
WSW	1.1	4.8	5.3	5.1	1.8	.3						18.4	9.9
W	.9	3.0	2.3	1.9	.6	.2						8.9	8.6
WNW	.7	1.1	1.3	.1								3.2	5.9
NW	.4	.4	1.0	.7	.1							2.7	8.5
NNW	.6	1.1	1.1	.9	.2							3.9	8.2
VARBL													
CALM												18.3	
	12.3	23.8	22.3	16.9	4.7	1.7						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 APR
STATION STATION NAME YEARS MONTH
ALL WEATHER CLASS 0900-1100
CONDITION HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.2	1.9	1.8	.6	.2						6.8	9.2
NNE	1.1	1.2	1.0	1.4	.2							5.0	8.4
NE	.4	1.3	.4	.3	.2	.2						3.0	8.6
ENE	.1	.2	.3	.1		.1						.9	9.0
E	.2	.6	.1	.2								1.1	6.3
ESE	.4	.1										.6	2.6
SE	.1	.3										.4	4.0
SSE	.6	.1										.7	2.8
S	.6		.6	.4	.1							1.7	8.5
SSW	.7	.4	1.9	1.9	.8							5.7	11.1
SW	1.0	1.4	3.9	5.2	1.1	.6						13.2	11.2
WSW	.9	1.6	4.8	7.8	3.6	1.9	.3	.2				21.0	13.6
W	2.0	2.6	6.2	4.0	1.9	1.2	.2					18.1	10.8
WNW	.3	.7	.6	1.7	.1	.2						3.6	10.3
NW	.6	1.4	1.0	.8								3.8	7.3
NNW	.3	1.1	2.2	1.8	.1							5.6	9.4
VARBL													
CALM												9.0	
	10.4	14.3	24.9	27.4	8.7	4.4	.6	.2				100.0	9.7

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

APR

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLASS

1200-1400

HOURS (L.H.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	2.9	2.6	2.7	1.0	.2						10.0	9.8
NNE	.6	1.1	1.2	1.0								3.9	7.9
NE	.9	.9	1.2	.6	.2	.1						3.9	8.0
ENE	.3	.4	.6	.6	.1	.3						2.3	10.6
E	.9	1.0	.2	.2	.1							2.4	5.6
ESE	.3	.7	.1									1.1	4.9
SE	.4	.1	.1									.7	3.5
SSE	.2	.6		.1								.9	4.9
S	.3	1.3	.8	.9	.1							3.4	8.4
SSW	.6	.3	1.7	2.0	.6	.1						5.2	11.0
SW	.9	1.6	3.7	4.0	1.0	.4						11.6	10.8
WSW	.6	1.0	4.2	5.8	2.8	2.0	.9					17.2	14.3
W	1.2	2.8	5.4	4.0	3.1	1.6	.3					18.4	12.3
WNW	.3	1.1	1.6	.9	.1							4.0	8.5
NW	.7	.8	1.6	.7	.3	.1						4.1	9.0
NNW	.8	1.3	2.1	1.2	.4							5.9	8.7
VARBL													
CALM												4.9	
	9.7	17.9	27.0	24.6	9.9	4.9	1.2					100.0	10.2

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 STATION MARMSTROM AFB MT/GREAT FALLS 68-77 YEARS APR MONTH 1500-1700 HOURS (L.S.T.)
ALL WEATHER CLASS
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.6	1.4	2.6	3.0	.8							8.3	10.4
NNE	.3	.8	2.2	.4	.7							4.4	9.5
NE	1.2	1.1	.9	1.2	.3	.2						5.0	8.9
ENE	.2	.7	1.6	.7	.3	.1						3.6	9.8
E	.3	1.1	.9	.3	.3	.1						3.1	8.6
ESE	.3	.2	.7									1.2	5.4
SE	.2	.1	.6	.2								1.1	7.6
SSE	.8	.9	.6	.3								2.6	5.8
S	.9	1.3	.8	.9								3.9	6.7
SSW	.1	1.1	2.6	2.0	.1							5.9	9.5
SW	.9	1.1	3.3	3.3	.8	.2						9.7	10.5
WSW	.1	.8	2.8	4.4	3.4	2.0	.3					13.9	15.4
W	1.1	2.1	4.9	5.7	2.9	1.4	.1					18.2	12.5
WNW	.3	.7	1.9	.8	.7	.1						4.4	10.5
NW	.6	.7	1.9	.8	.3	.2						4.4	9.5
NNW	.1	1.6	2.7	1.8	.6	.1						6.8	9.9
VARBL													
CALM												3.4	
	8.1	15.7	30.7	25.9	11.2	4.6	.4					100.0	10.5

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTROM AFB MT/GREAT FALLS 66-77 APR
STATION STATION NAME YEARS MONTH
CLASS 1800-2000
HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥56	%	MEAN WIND SPEED
N	.6	1.8	3.0	1.6	.3							7.2	8.7
NNE	.8	1.7	1.7	1.3								5.4	7.5
NE	.6	1.7	1.9	1.0	.4							5.6	8.7
ENE	.7	1.1	1.1	.7	.3							3.9	8.2
E	1.1	.9	.9									2.9	4.9
ESE	.4	.3	.7	.4	.1							2.0	8.0
SE	.6	1.2	.9	.1								2.8	6.0
SSE	.4	.9	1.0	.1								2.4	6.4
S	.7	2.9	1.6		.1							5.2	5.7
SSW	.2	3.0	1.6	.4	.1							5.3	6.7
SW	1.0	3.8	2.8	1.7	.2							9.4	7.6
WSW	.2	1.9	2.7	5.2	2.2	.7	.1					13.0	12.8
W	.4	2.4	3.1	4.6	2.2	.6						13.3	11.8
WNW	.2	.8	1.2	1.3	.4	.1						4.1	10.4
NW	.7	1.7	1.4	.9								4.7	7.3
NNW	.1	.8	.7	.4								4.3	9.0
VARBL													
CALM												8.3	
	9.2	26.8	26.3	21.3	6.6	1.5	.1					100.0	8.2

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.0	1.2	.7	.1							3.7	7.8
NNE	.8	.9	1.0	1.3								4.0	7.8
NE	.9	1.7	1.2	1.2								5.0	7.3
ENE	.7	.8	.6	.3	.1	.1						2.6	7.4
E	.7	.6	.4									1.7	4.9
ESE	.4	.6	.2	.3								1.6	6.5
SE	.2	1.1	.4	.4								2.2	6.7
SSE	1.1	1.7	2.1	.3	.1							5.3	6.8
S	1.2	4.9	1.8	.1	.1							8.1	5.4
SSW	1.1	4.0	1.6	.2								6.9	5.5
SW	.6	5.2	6.4	1.6		.1						13.9	7.7
WSW	.4	4.7	3.2	5.3	.8							14.4	9.4
W	.3	1.3	3.0	2.8	.6	.1						8.1	10.2
WNW	.8	1.1	1.9	.4	.4							4.7	8.1
NW	.7	.9	1.4	.2								3.2	6.6
NNW	.9	.8	1.3	1.3	.1							4.4	8.3
VARBL													
CALM												10.2	
	11.4	31.1	27.9	16.7	2.3	.3						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.5	1.9	1.4	.4	.1						6.0	9.0
NNE	.7	1.2	1.2	1.0	.3							4.4	8.2
NE	.7	1.1	1.0	.8	.2	.1						4.0	8.4
ENE	.3	.5	.5	.4	.2	.1						2.1	8.9
E	.5	.7	.3	.1	.1	.0						1.7	5.8
ESE	.3	.4	.2	.1	.0							1.0	5.9
SE	.3	.4	.4	.1								1.2	5.8
SSE	.6	.8	.6	.1	.0							2.2	5.8
S	1.3	2.3	1.0	.4	.1							5.1	5.7
SSW	.9	2.3	1.8	1.1	.2	.0						6.4	7.5
SW	1.5	3.6	4.9	3.3	.6	.2						14.1	8.8
WSW	.7	2.9	4.5	5.3	2.0	.9	.2	.0				16.6	11.6
W	1.0	2.4	3.8	3.3	1.5	.6	.1					12.8	10.8
WNW	.4	1.0	1.4	.7	.2	.1						3.8	8.6
NW	.6	.9	1.2	.6	.1	.0						3.5	7.8
NNW	.5	1.0	1.5	1.2	.2	.0						4.5	8.8
VARBL													
CALM												10.6	
	11.2	23.1	26.4	20.0	6.1	2.2	.3	.0				100.0	8.1

TOTAL NUMBER OF OBSERVATIONS

7200

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.1	1.0	.4		.1						3.2	7.1
NNE	.4	1.4	.5	.5	.2							3.1	7.7
NE	.9	.6	1.4	.5	.2							3.7	7.4
ENE	.3											.3	2.0
E	.6	1.0	.1									1.7	4.1
ESE	.5	1.0	.3	.1								1.9	5.2
SE	.3	1.0	.4	.2								1.9	6.3
SSE	1.0	1.4	.3	.1								2.8	4.6
S	2.5	4.9	.9	.1								8.4	4.6
SSW	1.6	6.7	1.8	.4								10.5	5.4
SW	1.9	8.5	4.6	1.7	.3							17.1	6.6
WSW	1.0	5.1	6.2	2.2	.4	.2						15.1	8.0
W	.9	1.9	2.4	1.1	.2							6.5	7.7
WNW	.2	1.3	.8	.3								2.6	6.9
NW	.1	.8	.8	.3								1.9	8.1
NNW	.2	.5	.3	.4								1.5	7.8
VARBL													
CALM												17.7	
	13.1	37.1	21.8	8.5	1.4	.3						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.9	1.3	.5								3.1	7.4
NNE	.9	1.1	1.0	.5	.2							3.7	7.2
NE	.5	.9	.3	.2								1.9	5.5
ENE	.6	.2	.1	.1								1.1	4.2
E	.2	.5										.8	4.1
ESE	.3	.2	.1									.6	4.2
SE	.5	.5	.1	.1								1.3	4.8
SSE	1.5	.8	.2									2.5	3.4
S	2.4	2.8	.4	.1								5.7	4.1
SSW	2.9	3.5	2.7	.4								9.6	5.5
SW	2.9	5.9	7.1	1.5	.9							18.3	7.2
WSW	1.8	3.6	5.1	2.6	.1	.1						15.3	7.5
W	1.7	3.4	1.6	.6	.1							7.5	6.0
WNW	.5	.6	1.0	.8	.1							3.0	8.4
NW	.4	1.0	.6	.3	.1							2.5	7.1
NNW	.1	1.0	.4	.6								2.2	8.2
VARBL													
CALM												21.1	
	17.8	28.9	22.0	8.5	1.5	.1						100.0	5.1

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.6	1.8	1.0								4.3	8.0
NNE	1.2	1.2	.8	1.1	.1							4.3	7.5
NE	.6	.5	.2	.3	.1							1.8	6.8
ENE	.8	.3		.1	.1							1.3	4.8
E	.8	.3										1.1	2.9
ESE	.3		.1	.1								.5	3.6
SE	.4	.3	.8	.1								1.6	6.5
SSE	.8	.5	.1	.1								1.5	4.8
S	1.5	2.0	.2	.3								4.1	4.6
SSW	1.7	1.8	1.9	.6								5.1	6.2
SW	2.3	2.9	7.4	3.3	1.1	.4						17.4	8.9
WSW	1.5	3.4	4.8	5.5	1.4							16.7	9.8
W	1.8	3.8	2.7	1.7	.1	.1						10.2	7.0
WNW	.5	.8	.4	.5	.1							2.4	7.8
NW	.6	.9	.9	.3	.2							2.9	7.6
NNW	.1	.9	1.1	.4	.1							2.6	8.4
VARBL													
CALM												21.2	
	15.8	20.3	23.2	15.6	3.3	.5						100.0	6.2

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
AF
OTHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTRUM AFB MT/GREAT FALLS 68-77 MAY
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0900-1100
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.3	2.0	1.2								5.9	7.1
NNE	.5	1.8	1.4	1.1	.2							5.1	8.0
NE	.5	1.7	1.6	.9	.1							4.8	7.7
ENE	.3	1.1	.5	.4	.1	.1						2.6	8.1
E	.9	1.4	.4	.1								2.8	4.6
ESE	.3	.2										.5	3.2
SE	.1	.2	.1									.4	5.3
SSE		.5		.1								.6	6.2
S	.8	.5	.3	.1								1.7	4
SSW	.4	1.0	.1	.2	.1							1.8	5
SW	.9	1.6	3.3	4.8	1.6	.4						12.7	11.0
WSW	.9	1.9	4.0	7.6	2.4	1.3	.3					18.4	13.0
W	1.1	3.9	5.2	3.7	1.2	.9	.1					15.9	10.1
WNW	.8	2.4	2.2	.8	.3	.1						6.5	7.7
NW	.4	1.4	1.4	.6		.2						4.1	8.2
NNW	.5	1.3	1.6	1.0	.1							4.5	8.1
VARBL													
CALM												11.6	
	9.8	22.3	24.2	22.6	6.1	3.0	.4					100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	2.5	2.5	1.5	.1							7.3	7.9
NNE	.5	1.5	1.3	.9	.3							4.5	8.1
NE	.6	1.3	2.3	1.6	.2							6.0	8.8
ENE	.4	1.4	1.1	1.2	.1							4.2	8.7
E	.5	2.5	.6	.4	.1							4.2	5.6
ESE	.3	1.2	.3	.3	.1							2.3	7.0
SE	.2	.3	.2									.8	5.1
SSE	.3	.3	.2									1.1	4.1
S	.4	1.0	.6									2.0	5.3
SSW	.3	1.4	.8	.6	.1							3.2	7.5
SW	1.0	1.9	2.6	3.0	1.3	.3						10.1	10.6
WSW	.3	1.6	3.1	6.1	2.6	1.0	.1					14.8	13.1
W	.6	3.0	4.6	4.4	2.5	1.2	.1					16.5	11.8
WNW	.6	1.9	2.3	.9	.3	.1	.1					6.2	8.3
NW	.3	1.4	1.3	.4	.6	.2						4.3	9.8
NNW	.4	1.2	1.5	1.8								4.9	8.7
VARBL													
CALM												7.5	
	8.1	24.4	25.3	23.2	8.4	2.8	.3					100.0	9.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 STATION MARMSTROM AFB MT/GREAT FALLS 68-77 YEARS MAY MONTH
ALL WEATHER CLASS 1500-1700 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.2	2.7	1.3								6.2	7.7
NNE	.3	1.6	2.0	1.2	.2							5.4	8.4
NE	.6	1.7	2.7	1.4								6.5	7.9
ENE	.1	1.3	1.4	1.0	.3							4.1	8.9
E	.3	2.0	1.1	.5	.2	.1						4.3	8.0
ESE	.5	1.2	1.1	1.0	.6							4.4	9.2
SE	.5	.6	.3	.3		.1						1.9	7.5
SSE	.1	.3	.2	.1								.8	6.7
S	.6	1.0	.9	.4	.2							3.1	7.6
SSW	.6	.8	1.8	.5	.3	.1						4.2	8.8
SW	.8	2.0	1.8	2.7	.6							8.0	9.5
WSW	.4	1.9	2.7	3.8	2.3	.8						11.8	12.4
W	.6	2.0	4.3	5.1	3.3	2.0						17.4	13.2
WNW	.5	1.5	2.0	1.7	1.0	.1						6.9	10.2
NW	.4	1.2	1.0	1.2	.3							4.1	9.3
NNW	.3	1.2	.9	1.4								3.8	8.7
VARBL													
CALM												7.2	
	0.1	21.6	26.9	23.5	9.5	3.2						100.0	9.3

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 MAY
STATION STATION NAME YEARS MONTH
ALL WEATHER 1800-2000
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.5	2.3	1.3	.1							6.0	8.1
NNE	.8	1.2	1.5	.4								3.9	6.5
NE	1.3	3.0	2.7	.9	.1							8.0	6.9
ENE	.3	2.9	1.6	.9	.1							5.8	7.1
E	1.2	2.4	1.3	.8	.3							5.9	6.9
ESE	.4	.5	.9	1.1	.2							3.1	9.7
SE	.8	1.0	1.0	.8	.1	.1						3.7	8.0
SSE	.8	1.2	.4									2.4	4.9
S	.8	1.6	.4	.8	.2							3.8	7.3
SSW	1.4	2.3	1.0	.6	.1							5.4	6.5
SW	.4	2.0	2.4	.9	.2							5.9	7.6
WSW	.1	.8	1.1	2.6	.8	.3						5.6	12.3
W	.4	1.2	4.2	5.9	2.3	.6						14.6	12.0
WNW	.9	.9	2.2	2.5	1.0	.2						7.5	11.0
NW	.9	1.3	1.2	.3			.1					3.8	6.6
NNW	.2	.9	1.2	1.1								3.3	8.6
VARBL													
CALM												11.4	
	11.3	24.6	25.2	20.6	5.5	1.3	.1					100.0	7.7

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 MAY
STATION STATION NAME YEARS MONTH
ALL WEATHER CLASS 2100-2300
CONDITION HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.9	.9	.4								3.0	6.3
NNE	1.0	1.5	.9	.4		.1						3.9	6.8
NE	.4	1.4	.5	.9	.1							3.3	7.7
ENE	1.0	1.1	1.2									3.2	5.3
E	1.0	.6	.1	.3								2.0	5.3
ESE	.8	.9	.5	.4								2.6	6.3
SE	.9	.9	.9	.9								3.4	7.3
SSE	1.7	1.5	1.5	.3								5.1	5.5
S	1.9	5.9	1.7	.2								9.8	5.1
SSW	1.3	5.5	1.1	.2								8.1	5.3
SW	1.0	4.6	3.4	1.1		.1						10.2	7.0
WSW	.5	2.8	3.2	2.6	.1							9.2	8.7
W	1.4	2.6	4.4	3.1	.6							12.2	8.8
WNW	.3	1.9	.6	.8	.1							3.8	7.6
NW	.4	1.1	1.4	.1	.2							3.2	7.4
NNW	.1	.4	.6	.3		.1						1.6	8.7
VARBL													
CALM												15.4	
	14.5	33.5	23.0	12.0	1.2	.3						100.0	5.5

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRON AFB IT/GREAT FALLS 68-77 MAY
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
ALL
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.2	1.8	1.0	.0	.0						4.9	7.6
NNE	.7	1.4	1.2	.8	.2	.0						4.2	7.6
NE	.7	1.4	1.5	.8	.1							4.5	7.5
ENE	.5	1.0	.7	.5	.1	.0						2.8	7.2
E	.7	1.3	.5	.3	.1	.0						2.8	6.1
ESE	.4	.6	.4	.4	.1							2.0	7.5
SE	.5	.6	.5	.3	.0	.0						1.9	6.9
SSE	.8	.8	.4	.1								2.1	4.9
S	1.4	2.5	.7	.3	.1							4.8	5.2
SSW	1.3	2.9	1.4	.5	.1	.0						6.1	6.1
SV	1.4	.7	4.1	2.4	.8	.2						12.5	8.4
WSW	.8	2.9	3.8	4.1	1.2	.5	.1					13.4	10.5
W	1.1	2.7	3.7	3.2	1.3	.6	.0					12.6	10.3
WNW	.6	1.4	1.4	1.0	.4	.1	.0					4.9	8.9
NW	.5	1.1	1.1	.5	.2	.1	.0					3.3	8.1
NNW	.3	.9	1.0	.9	.0	.0						3.1	8.5
VARBL													
CALM												14.1	
	12.3	26.6	24.0	16.8	4.6	1.5	.1					100.0	7.1

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 JUN
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0000-0200
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.0	.1	.2								2.0	5.3
NNE	1.1	.9	.6	.6								3.1	6.1
NE	.3	.4	.7	.1								1.6	6.6
ENE	.7	.3	.1									1.1	3.4
E	.2	.7										.9	3.9
ESE	.4	.3	.1									.9	4.1
SE	.4	.4	.4	.3								1.7	7.1
SSE	1.7	1.6	.6									3.8	4.2
S	4.0	5.7	1.3	.1								11.1	4.5
SSW	3.2	4.6	1.7	.2	.1							9.8	4.9
SW	2.3	4.9	6.3	1.8								15.3	7.0
WSW	1.1	4.1	5.3	2.7	.2							13.4	7.9
W	1.1	3.1	3.9	1.3	.2							9.7	7.2
WNW	1.0	1.0	.7	.1								2.8	5.5
NW	.3	.7	.4	.1								1.6	5.8
NNW	.6	.4	.4	.3								1.8	6.6
VARBL													
CALM												19.6	
	19.2	30.1	22.7	7.9	.6							100.0	4.9

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JUN
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0300-0500
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.0	.3	.2								2.2	5.8
NNE	.4	.8	.3	.3								1.9	7.1
NE	.6	.8	.6	.2								2.1	6.2
ENE	.3	.3										.7	3.3
E	.3	.2										.6	3.2
ESE	.4		.1									.6	3.8
SE	.7	.2	.1									1.0	3.3
SSE	.8	.8	.2									1.0	3.9
S	3.4	3.9	.4	.1								7.9	3.9
SSW	3.8	5.3	1.2									10.3	4.2
SW	3.3	7.0	5.2	2.1								17.7	6.3
WSW	1.9	4.7	5.4	4.0								16.0	7.9
W	2.0	3.2	3.2	1.4								9.9	6.8
WNW	.4	1.6	.3	.2								2.6	5.7
NW	.6	1.2	.4	.2								2.4	5.6
NNW	.9	.7	.3	.1	.1							2.1	5.5
VARBL													
CALM												20.3	
	20.6	31.7	18.3	9.0	.1							100.0	4.8

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTRQM AFB MT/GREAT FALLS 68-77 JUN
STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0600-0800
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.0	1.2	.4								3.2	7.3
NNE	1.1	1.7	.6	.7								4.0	5.7
NE	.3	.4	.4	.3	.1							1.7	8.0
ENE	.7	.2	.3									1.2	4.6
E	.4	.1	.1									.7	3.7
ESE	.1											.1	3.0
SE	.6	.3										.9	3.3
SSE	.7		.2									.9	3.5
S	1.4	1.3	.7									3.4	4.2
SSW	1.1	2.1	.8	.6	.1							4.7	6.2
SW	2.3	4.9	4.6	4.0	.8	.2						16.8	8.6
WSW	2.2	4.1	4.3	7.3	1.2	.1						19.3	9.6
W	2.2	3.9	4.7	2.2	.6	.1						13.7	7.7
WNW	.7	1.2	.9	.6								3.3	6.7
NW	.9	.8	1.6	.3								3.6	6.6
NNW	.6	1.0	.6	.2								2.3	5.7
VARBL													
CALM												20.2	
	15.9	23.1	20.9	16.7	2.8	.4						100.0	6.1

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/LSAF

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRUM AFB MT/GREAT FALLS 68-77
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
JUN
MONTH
0900-1100
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.6	1.2	.7								4.9	5.9
NNE	1.3	1.8	1.2	.9	.2							5.4	6.9
NE	1.3	1.9	.7	1.0								4.9	6.2
ENE	.4	1.3	.4	.2								2.4	5.6
E	.3	1.3	.3	.2								2.2	5.8
ESE	.3	.1										.4	3.0
SE	.4	.2										.7	3.0
SSE	.1	.2										.3	4.3
S	.6	.6	.6	.2								1.9	5.8
SSW	.9	1.2	.9	.1								3.1	5.4
SW	1.3	1.6	2.9	4.6	1.1	.3	.1					11.9	11.1
WSW	1.1	2.4	5.2	7.6	2.9	.9						20.1	12.0
W	1.4	5.6	4.9	4.3	1.6	.4						18.2	9.3
WNW	1.4	1.6	2.1	1.0	.7							6.8	8.0
NW	.4	1.6	.9	.6	.2							3.7	7.5
NNW	.7	1.4	.7	.4								3.2	6.7
VARBL													
CALM												9.8	
	13.7	24.3	22.0	21.8	6.7	1.7	.1					100.0	8.0

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.9	1.9	.6	.1	.1						5.8	7.0
NNE	.9	1.9	.8	.9	.2							4.7	7.4
NE	1.0	1.9	2.0	.3	.2							5.4	6.9
ENE	.6	1.8	.7	.8	.1							3.9	7.0
E	.4	1.6	2.0	.1								4.1	6.3
ESE	.4	.3	.1	.1								1.0	5.0
SE	.8	.7	.2									1.7	3.9
SSE	.6	.4	.1	.1								1.2	4.5
S	.8	.6	.3	.2								1.9	5.2
SSW	.8	1.1	1.3	.4	.2							3.9	7.3
SW	.7	2.0	2.4	2.8	1.2	.2						9.3	10.6
WSW	.8	1.2	3.9	7.9	3.8	1.3						18.9	13.3
W	.9	2.6	5.3	5.7	2.0	.6						17.0	11.0
WNW	.9	1.8	1.9	.6	.2							5.3	7.4
NW	.9	.8	1.9	.9	.7							5.1	8.9
NNW	.6	.9	1.0	.7	.1							3.2	7.8
VARBL													
CALM												7.6	
	12.1	21.3	25.9	22.0	8.9	2.2						100.0	8.7

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JUN

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

1500-1700

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	2.2	.6	1.4	.4	.1						5.8	8.4
NNE	1.8	2.0	1.9	1.1	.1	.2						7.1	7.6
NE	1.2	2.1	1.1	1.3								5.8	7.0
ENE		1.3	1.9	.6								3.8	7.9
E	.7	1.9	2.1	.6	.1							5.3	7.3
ESE	.6	1.3	1.0	.3								3.2	6.4
SE		1.0	.9	.4		.1						2.4	8.8
SSE	.2	.3	.2									.8	5.6
S	.4	.8	.4	.6								2.2	7.0
SSW	.3	.4	1.0	.2	.2	.1						2.3	9.1
SW	.7	.6	1.9	1.9	.8	.1						5.9	10.9
WSW	.4	1.0	4.1	5.3	2.6	.3						13.8	12.2
W	1.3	2.1	4.4	7.9	2.8	1.2	.1					19.9	12.4
WNW	1.1	1.3	2.4	2.2	.3							7.4	9.0
NW	.4	1.3	1.2	1.7	.1	.1						4.9	9.2
NNW	.4	1.1	.3	1.2	.2							3.3	8.9
VARBL													
CALM												6.0	
	10.7	20.9	25.6	26.8	.7	2.3	.1					100.0	9.2

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JUN

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

1800-2000

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.0	1.6	.7	.1							4.1	7.7
NNE	1.3	2.1	1.3	.7	.3	.1						5.9	7.3
NE	.4	1.3	2.6	1.2								5.6	8.0
ENE	.6	3.0	3.1	.8								7.4	6.9
E	1.0	3.3	2.0	.3								6.7	6.0
ESE	.6	1.8	1.2	.2								3.8	6.2
SE	.6	.6	.9	.1								2.1	5.9
SSE	.2	.7	.6									1.4	5.9
S	.8	1.6	1.1	.2								3.7	5.8
SSW	.6	.9	.8	.4								2.7	6.7
SW	.3	1.7	1.9	1.1	.4							5.4	9.1
WSW	.3	1.0	2.4	3.2	1.0	.2	.2					8.4	11.9
W	1.4	3.1	6.4	5.6	1.8	.4						18.8	10.3
WNW	.3	1.7	3.9	2.6	.4							8.9	9.5
NW	.4	1.0	1.7	1.6	.1							4.8	9.0
NNW	.2	1.1	1.0	.4	.2							3.0	8.3
VARBL													
CALM												7.3	
	9.9	25.8	32.4	19.1	4.4	.6	.2					100.0	7.9

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

58-77

JUN

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLASS

2100-2300

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.1	1.1	.3								3.3	6.2
NNE	1.1	1.1	1.1	.6	.1							4.0	6.9
NE	.7	1.3	.8	.3	.1							3.2	6.7
ENE	1.4	.9	.1									2.4	3.5
E	2.1	1.1	.7									3.9	3.9
ESE	.9	1.1	.3	.2	.1							2.7	5.6
SE	1.8	1.1	.8	.2	.1							4.0	5.3
SSE	.6	2.6	.6	.1								3.8	5.3
S	2.2	4.3	.6	.1								7.2	4.5
SSW	1.3	4.9	1.2	.1								7.6	5.1
SW	1.8	4.4	4.8	1.2								12.2	6.7
WSW	.8	3.6	2.9	3.0	.7	.1						11.0	9.0
W	.7	3.3	3.8	1.8	.2							9.8	7.9
WNW	.2	2.1	1.6	1.1								5.0	7.7
NW	.7	1.1	.6	.4								2.8	6.3
NNW		.3	.3	.1								.8	8.0
VARBL													
CALM												16.3	
	17.0	34.4	21.1	9.7	1.3	.1						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUN
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.9	1.3	1.0	.6	.1	.0						3.9	6.9
NNE	1.1	1.5	1.0	.7	.1	.0						4.5	7.0
NE	.7	1.3	1.1	.6	.1							3.8	7.0
ENE	.6	1.2	.8	.3	.0							2.9	6.2
E	.7	1.3	.9	.2	.0							3.0	5.8
ESE	.5	.6	.4	.1	.0							1.6	5.6
SE	.7	.6	.4	.1	.0	.0						1.8	5.7
SSE	.6	.8	.3	.0								1.7	4.7
S	1.7	2.3	.7	.2								4.9	4.7
SSW	1.5	2.6	1.1	.3	.1	.0						5.5	5.5
SW	1.6	3.4	3.7	2.4	.5	.1	.0					11.8	8.4
WSW	1.1	2.8	4.2	5.1	1.5	.4	.0					15.1	10.6
W	1.4	3.4	4.6	3.8	1.1	.3	.0					14.6	9.6
WNW	.8	1.5	1.7	1.0	.2							5.3	8.0
NW	.6	1.1	1.1	.7	.1	.0						3.6	7.8
NNW	.5	.9	.6	.4	.1							2.5	7.3
VARBL													
CALM												13.4	
	14.9	26.5	23.6	16.6	4.1	.9	.1					100.0	6.9

TOTAL NUMBER OF OBSERVATIONS 7200

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24117
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) D/R.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.0	.4	.1	.1							2.4	5.7
NNE	.4	1.9	1.0	.2	.1							3.7	6.5
NE	.5	1.1	.2	.1								1.9	5.1
ENE	1.3	.3		.1								1.7	3.3
E	.3	.9		.1								1.3	4.7
ESE	.6	.6	.1									1.4	3.7
SE	.9	1.7	.4	.2								3.2	5.2
SSE	1.5	2.2	1.0	.2								4.8	5.0
S	3.0	6.0	1.8	.1								11.0	4.7
SSW	2.2	8.3	.8									11.2	4.6
SW	2.5	5.5	3.7	.2								11.8	5.5
WSW	.6	3.7	1.8	1.1								7.2	6.8
W	1.1	2.5	1.6	.5	.1	.2						6.0	7.1
WNW	1.0	.2	.8	.1								2.0	5.1
NW	.5	.4	.2	.1	.1							1.4	5.9
NNW	.3	.1		.1		.1						.6	7.7
VARBL													
CALM												28.3	
	17.5	36.3	13.8	3.3	.4	.3						100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112

STATION

MALMSTROM AFB MT/GREAT FALLS

STATION NAME

68-77

YEARS

JUL

MONTH

ALL WEATHER

CLASS

0300-0500

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.0	.4	.1								2.3	5.0
NNE	.5	1.4	.5	1.1								3.5	7.7
NE	.3	.5	.1									1.0	4.6
ENE	.2	.3										.5	4.0
E	.3	.4										.8	3.7
ESE	.4	.5	.1									1.1	4.4
SE	.1	.6	.3									1.1	5.3
SSE	1.0	1.2	.2									2.4	4.1
S	3.9	3.4	.8	.1								8.2	4.0
SSW	4.1	5.8	1.8	.1								11.8	4.5
SW	3.8	7.6	3.5	.3								15.3	5.2
WSW	2.4	5.2	2.5	1.4		.1						11.5	6.2
W	1.3	4.2	1.4	.6								7.5	5.8
WNW	.1	.9	.6	.3	.1							2.0	7.8
NW	.5	.6	.2	.2								1.6	5.7
NNW	.5	.4	.1	.2								1.3	5.8
VARBL													
CALM												28.2	
	20.2	34.2	12.7	4.5	.1	.1						100.0	3.8

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTRÖM AFB MT/GREAT FALLS 68-77 JUL
STATION STATION NAME YEARS NORTH
ALL WEATHER
CLASS
CONDITION
0600-0800
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.1	.3	.1								2.9	4.2
NNE	1.0	.5	1.3									2.8	5.9
NE	.4	.8	.6									1.8	5.4
ENE	.2	.4	.1									.8	4.6
E	.5	.6	.1									1.3	4.0
ESE	.1	.2										.4	5.3
SE	.3	.1	.4	.1								1.0	6.0
SSE	.4	.8	.1									1.3	4.0
S	1.4	1.4										2.8	3.4
SSW	1.6	1.8	.8	.8	.1							5.1	6.1
SW	3.7	4.2	4.0	1.4	.2							13.4	6.4
WSW	2.6	5.1	4.1	2.8	.6							15.2	7.7
W	3.3	4.5	3.4	.4	.1							11.8	5.5
WNW	1.6	1.8	.8			.1						4.3	4.7
NW	.4	1.3	1.0	.1								2.8	6.1
NNW	.4	.9	.8									2.0	5.8
VARBL													
CALM												30.3	
	19.5	25.5	17.8	5.7	1.1	.1						100.0	4.2

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JUL

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLIM

0900-1100

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.9	.6	.1								4.0	4.9
NNE	1.9	1.7	1.1	.1								4.8	4.8
NE	.9	1.6	.6	.1		.1						3.3	5.8
ENE	1.1	1.8	.4	.1								3.4	4.6
E	1.3	1.3		.1								2.7	3.9
ESE	.4	.5	.4									1.4	5.1
SE	.4	.6	.1	.1								1.3	4.8
SSE	.1	.3										.4	4.0
S	1.1	.2		.1								1.4	3.5
SSW	1.1	.6	.5	.2	.1							2.6	5.8
SW	1.3	1.4	3.3	2.8	1.0	.3						10.1	10.1
WSW	1.9	2.7	6.0	4.2	1.6	.1						16.6	9.5
W	1.8	7.0	6.9	1.8	.5	.1						18.2	7.4
WNW	.9	3.1	1.7	.4								6.1	6.1
NW	1.3	2.2	1.6	.3								5.4	5.8
NNW	1.0	.8	.6									2.4	4.9
VARBL													
CALM												15.9	
	17.7	27.8	24.1	10.5	3.2	.6						100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JUL

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLASS

1200-1400

HOURS (L.S.T.)

CONDITION

SPD'D (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	2.0	2.5	.4								6.3	6.2
NNE	1.4	1.7	1.4	.3								4.8	5.8
NE	.8	2.7	1.6	.4								5.5	5.3
ENE	.5	1.7	1.9	.1	.1							4.4	6.4
E	1.3	2.0	.8	.2								4.3	5.1
ESE	.4	.6	.2	.4								1.7	6.8
SE	.1	.3	.4	.1								1.0	6.9
SSE	.5	.2	.3									1.1	4.3
S	.5	1.1	.4									2.0	4.9
SSW	.4	.9	.6	.5								2.5	7.2
SW	1.2	1.7	1.9	2.2	.1	.8						7.8	9.7
WSW	.9	1.8	4.6	3.3	2.0	.2						12.9	10.9
W	2.3	5.8	6.2	5.2	2.0	.1	.1					21.7	9.3
WNW	.6	1.3	2.5	1.1								5.5	7.7
NW	1.4	1.1	.8	.6								3.9	6.1
NNW	.8	1.2	1.0	.8		.1						3.8	7.3
VARBL													
CALM												10.8	
	14.5	26.2	27.2	15.7	4.3	1.2	.1					100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.5	1.6	.6								4.3	7.0
NNE	1.3	2.7	2.3	1.3	.3	.1						8.0	7.5
NE	1.0	3.4	2.3	1.0	.1							7.7	7.0
ENE	.9	1.7	1.5	1.1	.1							5.3	7.3
E	1.4	2.0	1.5	.3								5.3	5.9
ESE	.5	.8	.4	.1								1.8	5.4
SE	.4	.1	.5	.2								1.3	6.6
SSE	.4	.5	.3	.2								1.5	6.4
S	1.0	1.1	.4	.1	.1							2.7	5.4
SSW	.8	1.3	1.0	.2	.1							3.3	6.4
SW	.6	1.1	2.3	1.2	.1							5.3	8.3
WSW	.3	1.9	3.1	2.2	.8	.5						8.8	10.5
W	1.0	2.4	3.8	6.1	3.4	.4						17.1	12.0
WNW	.5	1.9	2.7	2.6	.5	.2	.1					8.6	10.0
NW	1.3	.9	2.5	1.5								6.1	7.8
NNW	.4	.9	.8	1.0								3.0	7.8
VARBL													
CALM												9.9	
	12.4	24.2	26.9	19.7	5.6	1.3	.1					100.0	7.8

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

64-77

JUL

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLASS

1800-2000

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	2.2	1.8	.9	.1	.1						5.9	7.6
NNE	.5	2.2	2.0	1.8	.2							6.8	8.5
NE	1.3	3.2	2.4	1.3	.1							8.3	6.9
ENE	1.5	3.8	3.9	.4	.1							9.7	6.4
E	2.0	2.8	2.4	.5								7.7	5.9
ESE	.6	.9	.9	.2								2.6	5.7
SE	.6	.9	.4	.4	.1							2.5	7.0
SSE	.4	.3	.5	.1								1.4	5.9
S	.8	1.0	1.0	.3								3.0	6.0
SSW	.6	.3	.8	.2	.1							2.0	6.8
SW	.9	1.2	1.0	1.2				.1				4.3	8.1
WSW	.2	.6	1.3	1.7			.1					4.0	10.4
W	.9	3.1	4.1	3.2	1.3	.2						12.8	9.9
WNW	.6	1.2	3.1	2.3	.6	.3						8.2	10.3
NW	.9	1.4	1.6	1.5	.3							5.7	8.7
NNW	.6	.8	1.6	1.0			.1					4.1	8.4
VARBL													
CALM												11.1	
	13.4	25.7	28.7	17.1	3.0	.6	.2	.1				100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.8	.8	.2								4.0	5.4
NNE	1.1	2.2	2.3	.2	.4	.1						6.2	7.1
NE	1.1	2.2	1.5	.4								5.2	5.8
ENE	1.7	1.6	.8									4.1	4.6
E	2.0	1.2	.6									3.9	4.0
ESE	1.0	1.7	.2	.1								3.0	4.5
SE	1.3	2.6	.6	.4								4.9	5.3
SSE	1.4	3.9	.9									6.1	4.8
S	1.6	4.9	1.4		.1							8.1	5.1
SSW	.8	3.1	.6	.1								4.6	5.1
SW	1.0	4.0	2.2	.8								7.8	6.3
WSW	.6	2.4	1.8	.8								5.6	6.8
W	1.1	2.2	1.1	1.0	.3							5.6	7.3
WNW	.4	1.2	.6	.5								2.8	6.8
NW	.9	1.1	.5									2.5	5.1
NNW	.3	.8	.2	.1								1.4	5.5
VARIAL													
CALM												24.2	
	17.4	36.7	16.1	4.6	.9	.1						100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JUL
STATION STATION NAME YEARS MONTH
ALL WEATHER ALL
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.6	1.1	.3	.0	.0						4.0	6.0
NNE	1.0	1.8	1.5	.6	.1	.0						5.1	6.9
NE	.8	1.9	1.2	.4	.0	.0						4.3	6.3
ENE	.9	1.5	1.1	.2	.0							3.7	5.9
E	1.2	1.4	.7	.2								3.4	5.1
ESE	.5	.7	.3	.1								1.7	5.1
SE	.5	.9	.4	.2	.0							2.0	5.7
SSE	.7	1.2	.4	.1								2.4	4.9
S	1.7	2.4	.7	.1	.0							4.9	4.7
SSW	1.4	2.8	.9	.3	.1							5.4	5.3
SW	1.9	3.3	2.7	1.2	.2	.1		.0				9.5	7.1
WSW	1.2	2.9	3.2	2.2	.6	.1	.0					10.2	8.6
W	1.6	4.0	3.6	2.4	1.0	.1	.0					12.6	8.5
WNW	.7	1.5	1.6	.9	.2	.1	.0					4.9	8.0
NW	.9	1.1	1.0	.6	.1							3.7	6.8
NNW	.6	.7	.6	.4		.0	.0					2.3	6.9
VARBL													
CALM												19.8	
	16.6	29.6	20.9	10.1	2.3	.6	.1	.0				100.0	5.5

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 AUG
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0000-0200
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.1	.8	.1								2.7	5.3
NNE	1.0	1.6	.9	.5	.1							4.1	6.5
NE	.9	.3	.6	1.1								2.9	8.0
ENE	.4	.2	.1									.8	4.0
E	.2	.2										.4	3.3
ESE	.6	.5	.3	.1								1.6	4.9
SE	.4	.3	.6	.1								1.5	6.1
SSE	1.2	1.2	.5									2.9	4.1
S	3.4	5.2	1.5	.3								10.4	4.7
SSW	2.7	6.0	2.0									10.8	5.0
SW	3.4	6.7	4.1	1.3		.1						15.6	5.9
WSW	1.4	4.5	2.3	.5		.1						8.8	6.0
W	1.9	3.0	1.3	.3								6.6	5.2
WNW	.8	.9	.1	.2								1.9	4.9
NW	1.1	.9	.3	.1								2.4	4.4
NNW	1.1	.5	.1									1.7	3.4
VARBL													
CALM												24.9	
	21.3	33.1	15.6	4.7	.1	.2						100.0	4.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 AUG
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0300-0500
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.2	.2	.2								2.8	4.9
NNE	.6	.8	.6	.1								2.2	5.2
NE	.2	1.0	.5									1.7	5.7
ENE	.4	.5	.1									1.1	3.7
E	.2	.2	.1									.5	4.4
ESE	.1	.3										.4	4.0
SE	.6	.6	.1	.1								1.5	4.6
SSE	1.9	.5	.5	.1								3.1	4.0
S	4.5	3.3	.3									8.2	3.4
SSW	4.6	5.5	.6	.2								11.0	4.1
SW	4.2	9.7	5.5	1.0	.1							20.4	5.7
WSW	3.0	4.4	3.0	.5	.1							11.1	5.7
W	1.7	3.0	1.1	.3								6.1	5.1
WNW	.3	1.5	.9	.1								2.8	6.0
NW	.8	1.1	.3	.1								2.3	5.0
NNW	.9	.8	.5	.2								2.4	5.5
VARBL													
CALM												22.5	
	25.4	34.4	14.5	3.0	.2							100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 AUG
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0600-0800
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.8	.3	.1	.1							2.3	5.0
NNE	.8	1.5	.3	.1								2.7	4.8
NE	1.1	.6	.8	.1								2.6	5.1
ENE	.1	.3	.1									.5	5.6
E	.8	.1										.9	2.6
ESE	.6			.1								.9	3.6
SE	.3	.3	.1									.8	4.4
SSE	.5	.3	.1									1.0	4.0
S	2.5	1.7	1.1									5.3	4.3
SSW	2.9	3.0	1.1	.6		.1						7.8	5.5
SW	4.0	5.3	3.4	1.7	.4							14.8	6.5
WSW	2.7	4.6	2.6	2.0	.6	.1						12.7	7.1
W	1.8	4.2	2.4	.9								9.2	6.0
WNW	1.5	1.9	.2	.2								3.9	4.6
NW	1.0	1.1	.1		.1							2.3	4.6
NNW	1.1	.3	.6	.1								2.2	4.8
VARBL													
CALM												30.4	
	22.6	26.1	13.2	6.1	1.3	.2						100.0	4.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

AUG

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLASS

0900-1100

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	1.8	.8	.9	.1							5.5	5.8
NNE	.9	1.8	1.4	.5								4.6	6.3
NE	1.0	1.6	1.2	.6	.1							4.5	6.5
ENE	.5	1.3	.4									2.3	4.4
E	.9	1.0	.4	.2								2.5	5.1
ESE	.4	.4	.1	.3								1.3	6.2
SE	.1	.6	.2									1.0	5.2
SSE	.2	.1	.1									.4	4.3
S	.8	.4	.3	.2	.1							1.8	6.5
SSW	1.2	.8	.8	1.0								3.7	7.1
SW	2.2	1.7	1.8	2.2	.5	.3						8.7	8.7
WSW	1.7	3.5	5.4	3.8	2.5	.9						17.7	10.5
W	3.9	5.2	4.7	3.8	.9	.1						18.5	7.6
WNW	1.4	2.6	1.8	.5	.1							6.5	5.2
NW	1.1	1.3	.9	.1								3.3	5.2
NNW	.9	.8	.9									2.5	5.2
VARBL													
CALM												15.3	
	18.9	24.9	21.2	14.1	4.3	1.3						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 AUG
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
1200-1400
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	2.4	2.0	.4								6.2	6.0
NNE	1.8	3.1	2.0	1.4								8.4	6.5
NE	.5	2.8	1.5	.4								5.3	6.6
ENE	.5	1.7	1.3	.3								3.9	6.4
E	1.2	1.0	.6	.1								2.9	4.8
ESE	.3	1.4	.3									2.0	5.4
SE	.2	.2	.2	.2								.9	6.9
SSE	.5	.3	.4									1.3	5.3
S	.3	1.2	.9	.3	.1							2.8	7.0
SSW	.3	.5	.6	.5								2.0	7.8
SW	.4	2.5	2.2	2.4	1.1							8.5	9.9
WSW	.9	2.2	3.2	4.0	2.2	.8	.1					13.2	11.6
W	1.8	6.8	5.5	3.4	1.1	.5	.2					19.4	8.8
WNW	1.1	3.0	1.9	1.6								7.6	7.3
NW	1.3	.6	1.0	.6								3.5	6.1
NNW	1.0	1.2	.9	.2								3.2	5.8
VARBL													
CALM												8.8	
	13.7	30.9	24.6	16.0	4.4	1.3	.3					100.0	7.3

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

AUG

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

1500-1700

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	2.2	2.6	1.4	.1							7.6	7.1
NNE	1.2	1.7	3.1	1.3	.5							7.8	8.4
NE	1.2	2.2	4.0	1.5	.1							8.9	7.7
ENE	.2	1.4	1.9	.6								4.2	7.6
E	1.1	1.8	1.6	.1								4.6	5.6
ESE	.3	.3	.6	.2								1.5	7.0
SE	.2	.3	.4	.4								1.4	8.3
SSE		.2	.2	.2								.6	9.5
S	.4	.4	.9	.3								2.0	7.6
SSW	.4	1.2	1.2	.2	.2							3.2	7.4
SW	.9	1.8	2.9	1.2	.4	.1						7.3	8.3
WSW	1.1	1.5	3.7	2.2	1.0	.3						9.7	9.9
W	.9	3.5	5.8	7.0	1.8	.8		.1				19.9	11.1
WNW	.9	1.9	2.3	1.2	.4							6.7	8.2
NW	1.1	1.7	.8	.6	.1	.1						4.4	6.6
NNW	.6	.4	.6	.3	.1							2.2	6.8
VARBL													
CALM												7.8	
	11.8	22.7	32.6	18.8	4.8	1.3		.1				100.0	7.9

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 AUG
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
1800-2000
HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.6	1.4	.9	.1							4.6	7.4
NNE	1.2	3.5	3.0	1.0	.4							9.1	7.3
NE	.6	3.0	3.8	1.9	.3							9.7	8.3
ENE	1.2	3.0	2.2	.9								7.2	6.6
E	1.3	2.6	2.0	.2								6.3	5.6
ESE	.4	.3	.9	.5								2.2	7.9
SE	.8	.9	.9	.4								2.9	6.2
SSE	.4	.5	1.0									1.9	5.9
S	1.0	1.8	1.0	.6	.1							4.5	6.2
SSW	1.1	.6	.8	.2								2.7	5.3
SW	1.0	2.3	2.2	1.3		.1						6.8	7.7
WSW	.6	1.3	1.5	1.0	.3							4.7	8.5
W	.9	3.3	4.0	2.9	.8							11.8	9.0
WNW	.6	1.4	2.4	1.6	.1							6.1	8.2
NW	.6	1.6	1.8	.3	.1							4.5	6.8
NNW	.8	1.4	.6	.5		.1						3.4	6.8
VARBL													
CALM												11.4	
	13.3	29.2	29.2	14.3	2.3	.2						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

66-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.4	.3	.3	.1	.1						3.0	6.9
NNE	.9	1.4	1.4	1.0	.2							4.8	7.7
NE	1.1	2.6	1.1	.9	.4							6.0	7.1
ENE	1.1	1.4	.5									3.0	4.3
E	1.4	.9	.3									2.6	3.8
ESE	.6	.9	.5	.3								2.4	6.2
SE	1.4	2.0	1.2	.2								4.8	5.4
SSE	1.2	3.3	1.8	.5								6.9	6.1
S	1.9	5.6	1.5	.3								9.4	5.1
SSW	1.4	4.1	1.0	.1								6.6	5.0
SW	1.4	4.0	2.3	.5	.1							8.3	6.4
WSW	.5	3.8	1.6	.6	.2							6.8	6.9
W	1.0	3.9	2.3	.4								7.5	6.2
WNW	.5	1.2	1.0	.2		.1						3.0	6.5
NW	.5	.8	.5	.1	.1	.1						2.2	7.1
NNW	.3	.3	.3	.1	.1							1.2	7.4
VARBL													
CALM												21.6	
	16.0	37.4	17.6	5.7	1.3	.3						100.0	4.8

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

AUG
MONTH

ALL WEATHER
CLASS

ALL
MOVES (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.5	1.0	.5	.1	.0						4.3	6.3
NNE	1.0	1.9	1.6	.7	.2							5.5	7.0
NE	.8	1.8	1.7	.8	.1							5.2	7.2
ENE	.6	1.2	.8	.2								2.9	6.0
E	.9	1.0	.6	.1								2.6	5.0
ESE	.4	.5	.3	.2								1.5	6.0
SE	.5	.7	.5	.2								1.8	5.8
SSE	.8	.8	.6	.1								2.3	5.3
S	1.9	2.5	.9	.3	.0							5.6	5.0
SSW	1.8	2.7	1.0	.4	.0	.0						6.0	5.3
SW	2.2	4.2	3.0	1.4	.3	.1						11.3	7.0
WSW	1.5	3.2	2.9	1.8	.9	.3	.0					10.6	8.6
W	1.7	4.1	3.4	2.4	.6	.2	.0	.0				12.4	8.1
WNW	.9	1.8	1.3	.7	.1	.0						4.8	6.9
NW	.9	1.1	.7	.3	.1	.0						3.1	5.9
NNW	.8	.7	.6	.2	.0	.0						2.3	5.7
VARBL													
CALTA												17.8	
	17.9	29.9	21.1	10.3	2.3	.6	.0	.0				100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 SEP
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0000-0200
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.3	1.4	1.6	.1	.2	.1						3.8	7.9
NNE	.6	1.4	.8	.3		.1	.1					3.3	7.7
NE	.2	.9	.9	.6								2.6	7.9
ENE	.6	.2	.1									.9	3.5
E	.2	.1	.1									.4	4.5
ESE		.1										.1	5.0
SE	.4	.7										1.1	3.9
SSE	1.4	1.1	.3									2.9	3.8
S	3.2	4.2	1.1									8.6	4.2
SSW	4.0	7.3	1.9	.3								13.6	4.8
SW	2.1	9.4	6.9	2.0	.6							21.0	7.0
WSW	1.3	5.4	4.8	1.9								13.4	7.1
W	.7	2.2	1.4	.2								4.6	6.1
WNW	.6	1.1	1.2									2.9	5.6
NW	.4	1.0	.9	.2								2.6	6.1
NNW	.1	.2	.2	.7								1.2	9.9
VARBL													
CALM												17.1	
	16.2	37.0	22.2	6.3	.8	.2	.1					100.0	5.1

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24117
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.7	.6	.7								2.4	7.8
NNE	.6	1.2	1.0	.8		.2						3.8	8.3
NE	.4	.8	.1	.3								1.7	6.1
ENE	.4	.2										.7	3.0
E	.2	.1										.3	2.7
ESE	.1	.1										.2	3.5
SE	.3	.1										.4	2.3
SSE	1.0	.1	.1									1.2	2.8
S	2.6	2.9	.4									5.9	4.0
SSW	3.0	4.6	1.6	.1								9.2	4.8
SW	4.4	9.9	6.6	2.7								23.6	6.3
WSW	3.8	6.3	3.9	2.6	.7	.2						17.4	7.1
W	2.0	2.9	1.2	.2								6.3	4.9
WNW	.3	1.3	.8	.1								2.6	5.9
NW	.4	1.0	1.0	.4								2.9	6.7
NNW	.7	.4	.4	.4								2.0	6.9
VARBL													
CALM												19.3	
	20.9	32.7	17.7	8.3	.7	.4						100.0	4.9

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MAINSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.1	.8	.1								3.0	5.1
NNE	.4	.9	.8	.7	.3							3.1	9.0
NE	.4	.8	.3	.3								1.9	6.3
ENE	.2	.1										.3	3.0
E	.4											.4	2.5
ESE	.3											.3	2.3
SE	.4	.2										.7	3.2
SSE	.6	.1										.7	2.3
S	1.3	1.8	.3									3.4	3.8
SSW	1.8	3.3	1.7	.6								7.3	5.6
SW	3.1	9.6	7.4	3.3	.6							24.0	7.2
WSW	1.8	5.1	3.4	3.1	.7	.1						14.2	8.0
W	2.3	3.7	1.6	.2								7.8	5.1
WNW	1.3	1.2	1.4	.1	.1							4.2	5.8
NW	.4	1.0	.3	.2								2.0	5.7
NNW	.9	.6	1.0	.3								2.8	6.4
VARBL													
CALM												23.8	
	16.9	29.4	19.1	9.0	1.7	.1						100.0	5.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALNSTROM AFB MT/GREAT FALLS 68-77 SEP
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
0900-1100
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	1.1	1.3	1.3	.4							5.8	7.8
NNE	1.1	1.7	.7	.1	.3							3.9	6.0
NE	1.0	.9	.3	.6								2.8	5.9
ENE	.4	.4	.7	.2								1.8	6.0
E	.3	.4										.8	4.1
ESE	.2	.6										.8	4.0
SE	.4	.1										.6	2.8
SSE	.1	.1										.2	3.5
S	.4	.2		.2	.1							1.0	7.0
SSW	.4	1.3	.9	1.1	.2							4.0	8.7
SW	1.2	1.7	4.7	7.4	1.7	.1						16.8	11.1
WSW	.9	3.8	5.3	7.1	3.7	1.1	.2					22.1	12.1
W	3.7	4.2	3.9	3.2	.4	.1						15.6	7.5
WNW	1.9	1.7	.7	.1								4.3	4.7
NW	1.0	1.1	.9	.3								3.3	6.3
NNW	.7	.4	1.0	.9		.1						3.1	8.6
VARBL													
CALM												13.2	
	15.4	19.8	20.3	22.7	6.9	1.4	.2					100.0	7.8

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING PRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 SEP
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
1200-1400
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.7	1.7	3.4	1.3	.1							8.2	7.4
NNE	.9	2.3	1.7	1.0	.1							6.0	7.0
NE	1.1	1.8	1.3	.2								4.4	5.5
ENE	.3	1.1	.7									2.1	5.5
E	.3	.8	.6									1.7	5.4
ESE	.2	.3	.1									.7	4.7
SE	.1											.1	2.0
SSE		.1										.1	4.0
S	.3	1.1	.7	.3								2.4	6.7
SSW	.2	.3	1.2	.8	.1							2.7	9.5
SW	.9	2.0	2.9	3.7	1.2	.3	.2					11.2	11.0
WSW	.8	3.0	4.4	8.6	2.6	.9		.1				20.3	12.1
W	2.1	3.6	6.9	5.8	1.1	.7	.1					20.2	9.9
WNW	1.1	1.1	1.6	.6	.2							4.6	7.5
NW	1.0	.8	.9	.6	.2							3.4	7.3
NNW	1.1	.8	1.1	.8	.3	.1						4.2	8.0
VARBL													
CALM												7.6	
	12.2	20.8	27.4	23.6	6.0	2.0	.3	.1				100.0	8.6

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTRUM AFB MT/GREAT FALLS 68-77 SEP
STATION STATION NAME YEARS MONTH
ALL WEATHER CLASS 1500-1700 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	2.0	2.2	1.3	.2							6.9	7.9
NNE	.8	2.2	3.0	1.7	.2							7.9	8.0
NE	.3	2.2	2.9	.9								6.3	7.7
ENE	.6	1.6	1.1	.4								3.7	6.5
E		.4	.2	.1								.8	7.3
ESE	.2	.3	.2									.8	4.4
SE	.1	.1	.2	.1								.6	6.4
SSE	.2	.3	.2	.1								.9	6.0
S	.4	1.1	1.4	.1								3.1	6.8
SSW	.8	1.0	1.4	.3								3.6	6.8
SW	1.0	1.7	4.4	2.2	.9	.1						10.3	9.3
WSW	1.0	1.8	3.8	6.1	2.4	.4						15.6	11.5
W	1.1	2.2	4.8	6.1	2.6	.3						17.1	11.4
WNW	.3	1.6	2.1	1.4	.3							5.8	8.8
NW	.8	1.8	1.2	.4	.2							4.4	6.9
NNW	.3	1.2	1.4	.7	.3	.1						4.1	9.0
VARBL													
CALM												8.2	
	9.1	21.6	30.8	22.1	7.2	1.0						100.0	8.4

TOTAL NO. OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 SEP
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
1800-2000
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.9	.8	1.1	.2							4.8	7.6
NNE	1.3	2.9	2.2	1.7	.3	.1						8.6	7.7
NE	1.6	4.0	1.3	1.3	.2							8.4	6.5
ENE	1.3	2.1	1.3	.1								4.9	5.5
E	.6	1.0	.3	.1								2.0	5.4
ESE	.3	.3										.7	3.8
SE	.8	1.1	.2									2.1	4.4
SSE	.9	1.0	.4	.2								2.6	5.3
S	1.7	3.8	1.6	.1								7.1	5.2
SSW	.6	3.1	1.0	.2	.1	.1						5.1	6.5
SW	1.2	3.9	3.2	.9	.4							9.7	7.3
WSW	.3	1.7	2.9	3.1	.6							8.6	10.3
W	.8	2.6	4.8	2.7	.6	.1						11.4	9.2
WNW	.9	.9	1.4	1.6								4.8	8.3
NW	.3	1.1	1.2	.6								3.2	7.2
NNW	.6	1.4	.7	.7								3.3	6.9
VARBL													
CALM												12.8	
	13.9	32.8	23.4	14.3	2.4	.3						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77
STATION NAME STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
SEP
MONTH
2100-2300
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.8	.9	.8	.1							3.6	7.7
NNE	1.1	1.1	1.0	.7		.1						4.3	6.8
NE	.8	1.3	1.2	.6								3.9	6.8
ENE	.7	.3		.3								1.3	4.9
E	.8	.6										1.3	3.5
ESE	.3	.6	.2									1.1	4.6
SE	1.0	1.4	.4									2.9	4.5
SSE	.8	1.7	1.0									3.4	5.2
S	2.7	6.0	2.7	.3								11.7	5.2
SSW	2.1	6.1	2.8	.3								11.3	5.5
SW	2.1	6.4	3.8	1.7	.4	.1						14.6	7.0
WSW	.6	3.9	3.9	1.8	.1							10.2	7.9
W	.6	2.8	3.1	.7								7.1	7.0
WNW	.1	.8	.8	.3								2.0	7.4
NW	.7	1.0	1.3	.4	.1							3.6	7.1
NNW	.2	1.3	.6	.2	.2							2.6	7.3
VARBL													
CALM												15.4	
	15.4	36.1	23.7	8.1	1.0	.2						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 SEP
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
ALL
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.3	1.4	.8	.2	.0						4.8	7.5
NNE	.8	1.7	1.4	.9	.2	.1	.0					5.1	7.6
NE	.7	1.6	1.1	.6	.0							4.0	6.7
ENE	.6	.8	.5	.1								2.0	5.5
E	.4	.4	.2	.0								1.0	4.8
ESE	.2	.3	.1									.6	4.2
SE	.5	.5	.1	.0								1.1	4.2
SSE	.6	.6	.3	.0								1.5	4.5
S	1.6	2.6	1.0	.1	.0							5.4	5.0
SSW	1.6	3.4	1.6	.5	.1	.0						7.1	5.8
SW	2.0	5.6	5.0	3.0	.7	.1	.0					16.4	8.0
WSW	1.3	3.9	4.1	4.3	1.3	.3	.0	.0				15.2	9.8
W	1.7	3.0	3.5	2.4	.6	.2	.0					11.3	8.5
WNW	.8	1.2	1.2	.5	.1							3.9	6.9
NW	.6	1.1	1.0	.4	.1							3.2	6.7
NNW	.6	.8	.8	.6	.1	.0						2.9	7.8
VARBL													
CALM												14.7	
	15.0	28.8	23.1	14.3	3.3	.7	.1	.0				100.0	6.5

TOTAL NUMBER OF OBSERVATIONS 7200

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 UCT
STATION STATION NAME YEARS MONTH
ALL WEATHER 0000-0200
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.4	.5	.5	.1							3.7	6.4
NNE	.6	1.3	1.4	.6		.1						4.1	7.6
NE	.4	1.0	.9	.1								2.4	6.1
ENE	.2	.8	.3									1.3	5.3
E	.2											.2	1.5
ESE	.1	.1										.2	4.5
SE	.3	.1										.4	3.3
SSE	.8	.2										1.0	2.6
S	2.3	2.7	1.4	.2								6.6	4.8
SSW	2.4	5.6	2.6	.6								11.2	5.6
SW	2.2	7.1	10.5	4.1	.9							24.7	8.1
WSW	1.3	4.0	5.7	3.9	1.0	.4						16.2	9.4
W	1.7	2.3	2.4	1.2	.1	.1						7.7	7.2
WNW	.2	.5	.8	.1								1.6	6.5
NW	.6	.8	.8	.3								2.5	6.5
NNW	.2	.9	.6	.4								2.2	7.3
VARBL													
CALM												14.1	
	14.6	28.6	27.8	12.2	2.0	.6						100.0	6.2

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

66-77

UCT

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

0300-0500

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.0	.3	.5	.1							2.9	6.4
NNE	.8	1.1	1.2	.1								3.1	6.0
NE	.3	.5	.6	.4	.1							2.0	7.9
ENE	.3	.5										.9	4.0
E	.2	.3										.5	3.4
ESE	.1											.1	2.0
SE	.1											.1	2.0
SSE	.9	.2										1.1	2.6
S	1.6	1.3	.4	.2								3.5	4.6
SSW	2.6	3.4	2.7	1.0								9.7	5.9
SW	2.7	8.5	12.0	5.1	.5							28.8	7.9
WSW	2.0	3.4	4.9	4.2	1.2	.3						16.1	9.2
W	1.9	2.9	1.9	.8	.3	.1						8.0	6.6
WNW	.6	1.2	.6	.1								2.6	5.7
NW	.4	1.0	.4	.5								2.4	6.7
NNW	.2	.9	.5	1.0								2.6	8.1
VARBL													
CALM												15.6	
	15.8	26.2	25.8	13.9	2.3	.4						100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 STATION MALMSTRUM AFB MT/GREAT FALLS 68-77 YEARS DCT MONTH 0600-0800 HOURS (L.S.T.)

ALL WEATHER CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.9	1.1	.4	.1							3.3	6.8
NNE	.6	1.2	.6	.2								2.7	5.5
NE	.6	1.1	.9									2.6	5.1
ENE	.5	.6	.1									1.3	3.4
E	.2											.2	2.5
ESE	.1	.1										.2	3.0
SE	.6											.6	2.7
SSE	.8	.2										1.0	2.6
S	1.3	.6	.8	.3								3.0	5.4
SSW	.9	3.4	3.0	2.0	.1							9.5	7.7
SW	3.7	7.3	9.9	7.4	1.0							29.2	8.3
WSW	1.8	3.9	4.7	4.5	1.4	.3						16.7	9.4
W	1.8	2.9	1.6	1.1								7.4	6.3
WNW	.9	.9	.5	.3								2.6	6.0
NW	.1	.5	.9	.4								1.9	7.9
NNW	.2	.3	.6	.4								1.6	8.3
VARBL													
CALM												16.1	
	15.1	24.0	24.7	17.2	2.6	.3						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

66-77
YEARS

OCT
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.7	1.1	.9	.2							4.6	7.8
NNE	.9	1.3	.8	.3	.3							3.5	6.9
NE	.8	.8	.8	.4								2.7	6.7
ENE	1.0	.5										1.5	3.3
E	1.0	.2										1.2	2.5
ESE	.4	.1	.1									.6	3.7
SE	.4	.2		.1								.8	4.1
SSE	.1	.1	.1									.3	5.7
S	.5	.5	.4		.1							1.6	6.0
SSW	.3	.6	.8	2.4	.4	.2						4.7	11.6
SW	.6	1.6	4.4	10.2	4.1	.9	.1					21.9	13.3
WSW	1.4	2.0	5.2	10.4	4.4	1.7	.2					25.4	13.1
W	1.7	3.3	3.7	3.1	1.1	.2	.2					13.3	9.4
WNW	.9	.5	.2	.3								1.9	5.6
NW	.3	.5	.4	.4								1.7	7.0
NNW	.3	.8	.4	1.0								2.5	8.3
VARBL													
CALM												11.6	
	11.4	14.9	18.3	29.6	10.6	3.0	.5					100.0	9.5

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAG/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.1	1.4	.9	.1							4.3	7.8
NNE	1.6	1.7	1.1	.4	.1							4.9	6.0
NE	1.1	1.5	1.3	.5								4.4	6.2
ENE	.8	1.2	.4									2.4	4.9
E	.8	1.2	.3									2.3	4.4
ESE	.5	.3										.9	3.4
SE	.6	.3										1.0	3.1
SSE	.2	.2										.4	4.0
S	.4	.3	.3	.1								1.2	5.6
SSW	.3	.3	.8	1.9	.4							3.8	12.0
SW	.4	.8	2.8	7.5	2.4	1.4	.3					15.6	14.1
WSW	.4	1.9	4.5		6.9	2.8	.2					26.1	14.5
W	1.5	2.2	3.2	4.9	2.9	.6	.6	.1				16.1	12.4
WNW	.8	.4	.9	1.0	.2	.3						3.5	9.8
NW	.3	.6	.9	.3	.2							2.8	9.2
NNW	.9	1.2	.8	1.2	.3							4.3	8.3
VARBL													
CALM												6.0	
	11.5	13.3	18.6	28.6	13.5	5.2	1.2	.1				100.0	10.7

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 UCT
STATION STATION NAME YEARS MONTH
ALL WEATHER 1500-1700
CLASS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.3	1.5	1.6								5.4	8.1
NNE	1.3	3.1	1.8	.9								7.1	6.2
NE	.6	3.2	1.4	.9	.1							6.2	6.9
ENE	.8	.9	.8	.3								2.7	6.0
E	.9	.2	.3									1.4	4.0
ESE	.2	.1	.1									.4	4.3
SE	.2	.4	.3									1.0	4.9
SSE		.2	.2									.4	7.0
S	.6	.4	.8	.4								2.3	6.8
SSW	.5	.5	1.4	1.3								3.8	8.9
SW	.9	1.8	6.1	5.9	2.0	.4						17.2	11.3
WSW	1.2	2.9	4.7	8.1	3.1	1.0	.1					21.1	12.2
W	.8	1.9	3.2	6.0	2.2	1.4	.3					15.8	12.9
WNW	.3	.6	1.0	.8	.2	.1						3.0	9.5
NW	.2	.5	.5	1.1	.1							2.5	9.3
NNW	.6	.6	1.3	.5								3.1	7.4
VARBL													
CALM												6.7	
	10.1	18.9	25.5	27.7	7.7	2.9	.4					100.0	9.4

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24117 MALMSTRUM AFB MT/GREAT FALLS 68-77 UCT
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
1800-2000
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	1.1	.8	.1							3.2	7.7
NNE	1.0	1.8	2.3	.5								5.6	6.6
NE	.6	1.4	1.1	.4								3.5	6.4
ENE	1.2	.8	.1									2.0	3.7
E	1.0	.6	.1									1.7	3.3
ESE	.1	.4	.1									.6	5.0
SE	.9	.5										1.4	3.3
SSE	.8	1.5	.2									2.5	4.4
S	1.5	2.8	.6	.1								5.1	4.7
SSW	1.5	5.1	2.3	.8	.1							9.7	6.1
SW	1.0	5.7	8.2	4.3	.6	.2						20.0	8.7
WSW	.9	3.1	4.0	5.1	1.0	.5						14.5	10.3
W	.6	1.9	4.0	4.1	1.0	.3						11.9	10.5
WNW	.6	.5	.5	.5								2.3	7.3
NW	.2	.2	.6	.3								1.4	7.9
NNW	.5	1.4	1.1									3.0	5.6
VARBL													
CALM												11.5	
	13.0	28.5	26.2	16.9	2.8	1.1						100.0	6.9

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 STATION MARMSTROM AFB MT/GREAT FALLS 68-77 YEARS OCT MONTH
2100-2300 HOURS (L.S.T.)
ALL WEATHER CLASS
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.8	1.0	.8								3.1	7.5
NNE	.6	1.0	1.1	.3								3.0	6.6
NE	.9	.8	.5	.4	.1							2.7	6.9
ENE	.3	1.0	.2	.1								1.6	5.1
E	.1	.3										.4	4.0
ESE		.2										.2	5.0
SE	.3	1.2	.2									1.2	4.5
SSE	.6	.6										1.3	3.3
S	2.3	5.7	.6	.6								9.2	5.0
SSW	2.3	6.1	3.8	.8								12.9	5.9
SW	2.0	7.3	8.7	3.9	.6	.1	.1					22.8	8.0
WSW	.9	5.2	5.2	3.9	1.4	.2						16.7	9.3
W	.5	2.7	1.8	1.3	.3	.1						6.8	8.1
WNW	.5	.5	.2	.3	.1							1.7	7.0
NW	.6	1.1	1.1	.2								3.0	6.4
NNW	.9	.8	.5	.3	.1							2.6	6.1
VARBL													
CALM												10.0	
	13.8	35.2	24.9	12.9	2.7	.4	.1					100.0	6.5

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

001
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.8	1.1	1.0	.8	.1							3.8	7.4
NNE	.9	1.6	1.3	.4	.1	.0						4.3	6.4
NE	.7	1.3	.9	.4	.0							3.3	6.5
ENE	.6	.8	.2	.1								1.7	4.6
E	.5	.4	.1									1.0	3.6
ESE	.2	.2	.0									.4	4.0
SE	.5	.3	.1	.0								.9	3.8
SSE	.5	.4	.1									1.0	3.7
S	1.3	1.8	.7	.3	.0							4.1	5.1
SSW	1.3	3.1	2.2	1.3	.1	.0						8.1	7.1
SW	1.7	5.0	7.8	6.0	1.5	.4	.1					22.5	9.6
WSW	1.2	3.3	4.9	6.2	2.5	.9	.1					19.1	11.3
W	1.3	2.5	2.7	2.8	1.0	.4	.1	.0				10.9	9.9
WNW	.6	.7	.6	.4	.1	.1						2.4	7.5
NW	.4	.7	.7	.5	.0							2.3	7.6
NNW	.5	.8	.7	.6	.1							2.7	7.4
VARBL													
CALM												11.5	
	13.2	24.0	24.0	19.9	5.5	1.7	.3	.0				100.0	7.7

TOTAL NUMBER OF OBSERVATIONS

7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.3	.6	.4	.6		.1						2.0	9.3
NNE	.3	1.9	1.1	.1								3.4	5.9
NE	1.1	.7	.2									2.0	3.9
ENE	.8	.3	.1									1.2	3.5
E	.1	.1	.2									.4	7.3
ESE	.1	.4										.6	3.8
SE	.2	.2	.1									.6	4.0
SSE	.6	.3	.1									1.0	4.0
S	1.0	2.0	.3	.4								3.8	5.5
SSW	.9	2.2	2.3	2.7	.6							8.7	8.9
SW	2.1	4.6	9.4	7.8	2.2	1.3	.1					27.6	10.3
WSW	1.2	4.1	4.1	6.3	2.1	.4	.2	.1				18.7	10.9
W	1.0	2.2	3.0	1.2	.7	.6						8.7	9.3
WNW	.9	.8	.8	.2								2.7	5.9
NW	.1	.9	.3	.4								1.8	7.8
NNW	.4	.3	.4	.1								1.3	5.8
VARBL													
CALM												15.7	
	11.2	21.7	23.1	19.9	5.6	2.4	.3	.1				100.0	7.6

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 NOV
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0300-0500
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.7	.4	.6								2.2	7.1
NNE	.8	1.4	.3									2.6	4.4
NE	.6	.8	.4	.1								1.9	5.4
ENE	.6	.3										.9	2.9
E	.3		.3	.1								.8	6.1
ESE			.1									.1	7.0
SE	.4	.3										.8	3.3
SSE	.4	.1										.6	2.4
S	1.3	2.0	.2	.3	.1							4.0	5.4
SSW	.9	3.3	2.8	1.3	.4	.1						8.9	8.0
SW	1.6	6.1	9.8	7.4	1.8	.3	.2	.1				27.3	9.8
WSW	1.1	3.9	4.6	6.9	1.7	1.1	.3					19.6	11.2
W	.6	2.1	2.9	1.6	.7	.3						8.1	10.0
WNW	.4	1.3	.7									2.4	5.4
NW	.2	1.0	.6									1.8	5.8
NNW	.3	.4	.8	.2								1.8	6.6
VARBL													
CALM												16.3	
	10.1	23.9	23.9	18.6	4.7	1.9	.6	.1				100.0	7.5

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 58-77 NDV
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0600-0800
HOURS (L.S.T.)

SPEED (KNTS) DIP.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.8	.3	.3								2.3	5.7
NNE	.6	.6	.7	.2								2.0	6.2
NE	.8	.4	.1	.1								1.4	4.3
ENE	1.0											1.0	1.9
E	.3	.4	.2	.1								1.1	5.5
ESE	.2	.1	.2									.6	5.4
SE	.2	.1										.3	2.3
SSE	.3	.2										.6	3.2
S	.9	1.2	.4	.2								2.8	5.4
SSW	1.1	3.3	2.3	2.2	.8	.1						9.9	8.5
SW	1.8	6.2	5.3	7.3	2.2	.2	.2					26.3	9.9
WSW	1.3	3.4	4.6	6.7	1.6	1.8	.1					19.4	11.5
W	1.1	3.8	2.6	1.6	.7	.3	.1					10.1	8.4
WNW	.7	.6	.7									1.9	5.4
NW	.4	.9	.6	.1								2.0	5.9
NNW	.4	1.2	.2	.4								2.3	6.1
VARBL													
CALM												15.9	
	12.1	23.3	21.2	19.3	5.2	2.4	.4					100.0	7.5

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MEV
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.7	.7	.4								2.4	6.9
NNE	1.0	1.1	.9	.2	.2							3.4	6.4
NE	.9	1.1										2.0	3.4
ENE	.3	.4	.2									1.0	4.7
E		.2										.7	3.2
ESE	.7	.3	.2									1.2	4.0
SE	.4	.1										.6	2.6
SSE	.3											.3	3.0
S	.4	.7	.1	.1	.1							1.4	5.5
SSW	.8	.8	.9	1.9	1.7	.3						6.3	12.1
SW	.7	3.0	6.1	9.4	4.7	1.3	.1					25.3	12.7
WSW	.9	2.3	4.8	7.4	4.8	2.2	.4					22.9	13.7
W	1.4	2.8	2.7	3.0	.7	1.1	.4	.2				12.3	11.5
WNW	.2	.7	.4	.4	.1			.1				2.0	9.4
NW	1.1	.4	.2	.6	.1							2.4	6.5
NNW	.8	.7		.1								1.6	3.9
VARBL													
CALM												14.0	
	11.1	15.3	17.2	23.7	12.3	5.0	1.0	.3				100.0	9.6

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	1.3	1.0	.6		.2						4.7	6.7
NNE	2.2	1.1	.9	.3	.2							4.8	5.5
NE	1.1	1.6	.1	.1								2.9	4.0
ENE	1.2	1.4	.3	.1								3.1	4.3
E	.7	.4	.3									1.4	4.4
ESE	.4	.4										.9	3.1
SE	.2	.2										.4	3.8
SSE	.2											.2	2.0
S	.2	.4	.1	.1								.9	5.9
SSW	.4	.6	.8	2.6	1.3	.3						6.0	13.2
SW	.4	.8	2.6	6.9	4.9	2.4	.6					18.6	15.8
WSW	.2	1.3	2.8	9.6	5.8	4.4	.8	.1				25.0	16.3
W	1.2	1.2	2.3	3.6	2.6	2.1						13.0	13.7
WNW	1.0	1.0	1.3	1.1	.8	.1						5.3	9.6
NW	1.1	.9	.9	.4								3.3	6.0
NNW	.7	.8	.4	.1	.2							2.2	6.5
VARBL													
CALM												7.2	
	13.0	13.6	13.9	25.4	15.8	9.7	1.3	.1				100.0	11.4

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

NDV
MONTH

1500-1700
HOURS (L.S.T.)

ALL WEATHER
CLASS

COPYRIGHT

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.2	1.2	.4	.2							3.8	7.3
NNE	1.2	1.1	1.2	.3	.3							4.2	6.9
NE	2.4	3.8	1.7	.1								8.0	4.8
ENE	1.1	1.4	.4									3.0	4.4
E	.4	.6	.1	.2								1.3	5.7
ESE	.2											.2	2.0
SE	.2	.2	.1									.6	4.8
SSE		.3										.3	4.3
S	.7	1.0	.6	.9								3.1	7.3
SSW	.2	.8	2.9	2.1	.4	.1	.1					6.7	10.9
SW	.8	2.7	4.6	7.2	2.7	.8	.1					18.8	11.9
WSW	.8	1.7	3.2	6.7	4.8	2.0	.6	.1				19.8	14.6
W	.4	2.1	2.1	4.0	2.8	1.8		.1				13.3	13.8
V.NW	.6	.9	1.3	.4	.2	.1						3.6	8.2
NW	.6	.7	.4	.3		.1						2.1	7.3
NNW	1.0	.8	.6		.1							2.4	5.2
VARBL													
CALM												8.7	
	11.3	19.2	20.5	22.8	11.6	4.9	.8	.2				100.0	9.7

TOTAL NUMBER OF OBSERVATIONS

899

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/M4C

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

NDV

STATION

STATION NAME

YEAR

MONTH

ALL WEATHER

1800-2000

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	.9	.4	1.0								2.6	6.7
NNE	1.2	1.1	.4	.2	.1							3.1	5.5
NE	2.1	1.3	.8									4.2	4.3
ENE	.8	.7	.4									1.9	4.4
E	.9	.6	.2									1.7	3.7
ESE		.1										.1	5.0
SE	.2	.3	.2									.8	5.4
SSE	.8	.4	.2									1.4	3.7
S	1.0	3.2	.7	.3								5.2	5.3
SSW	1.0	2.7	3.0	2.5	.2							9.4	8.4
SW	1.1	4.2	7.8	6.8	1.8	.4						22.2	10.2
WSW	1.2	2.3	4.6	6.9	2.1	1.3	.1					18.6	12.0
W	1.2	1.9	3.1	3.8	.8	.4						11.3	10.5
WNW	.6	.9	.8	.1								2.3	6.2
NW	.2	.4	.3	.1								1.1	5.9
NNW	.6	.8	.4	.3								2.1	6.4
VARBL													
CALM												10.9	
	14.2	22.0	23.5	22.1	5.0	2.2	.1					100.0	7.9

TOTAL NUMBER OF OBSERVATIONS

897

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

NNV
MOYR

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.6	1.0	.8								3.0	7.7
NNE	1.0	1.1	.8	.1	.2							3.2	6.0
NE	1.8	1.3	.7									3.8	4.3
NNE	.7	.4										1.1	2.9
E		.2	.1									.3	5.7
ESE	.4	.1										.6	2.8
SE		.4	.2									.7	6.2
SSE	.3	.4	.2									1.0	4.6
S	1.7	2.6	.3	.4								5.0	5.0
SSW	1.6	4.6	3.8	2.0	.3	.1						12.4	7.6
SW	1.4	4.9	9.5	6.7	2.8	.6						25.9	10.3
WSW	1.2	2.6	5.7	5.8	2.2	1.1						18.6	11.3
W	.9	2.0	2.2	1.6	.8	.1	.1					7.7	9.4
WNW	.4	.3	.8	.2	.1							1.9	7.3
NW	.8	.7	.6									2.0	4.9
NNW	.4	.3	.1									.9	3.9
VARBL													
CALM												11.9	
	13.4	22.6	26.0	17.6	6.5	1.9	.1					100.0	7.7

TOTAL NUMBER OF OBSERVATIONS 897

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

NOV
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.8	.7	.6	.0	.0						3.0	7.1
NNE	1.0	1.2	.8	.2	.1							3.4	5.9
NE	1.3	1.4	.5	.1								3.3	4.4
ENE	.8	.6	.2	.0								1.7	3.9
E	.4	.3	.2	.1								1.0	4.9
ESE	.3	.2	.1									.5	3.8
SE	.3	.3	.1									.6	4.2
SSE	.4	.2	.1									.7	3.7
S	.9	1.6	.3	.4	.0							3.3	5.6
SSW	.9	2.3	2.3	2.2	.7	.1	.0					8.5	9.3
SW	1.2	4.1	7.3	7.5	2.9	.9	.2	.0				24.0	11.2
WSW	1.0	2.7	4.3	7.0	3.1	1.8	.3	.0				20.3	12.9
W	1.0	2.3	2.6	2.5	1.2	.8	.1	.0				10.6	11.1
WNW	.6	.8	.8	.3	.2	.0		.0				2.8	7.5
NW	.6	.7	.5	.3	.0	.0						2.1	6.3
NNW	.6	.7	.4	.2	.0							1.8	5.7
VARBL													
CALM												12.6	
	12.1	20.2	21.2	21.2	8.3	3.8	.6	.1				100.0	8.6

TOTAL NUMBER OF OBSERVATIONS

7193

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

NALMSTRUM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	1.7	1.6	.4								4.2	6.7
NNE	1.2	1.6	.4	.1	.1							3.4	5.2
NE	.5	.9	.6									2.0	5.3
ENE	.3	.4										.8	3.7
E	.2											.2	2.5
ESE	.3											.3	2.0
SE													
SSE	.3		.2									.5	4.8
S	1.3	1.0	.2									2.5	3.9
SSW	1.3	2.3	2.0	2.3	.6	.3						8.8	9.4
SW	1.1	5.7	9.1	8.2	4.6	.9	.4					30.0	11.5
WSW	1.1	3.7	5.2	5.5	3.4	1.1	.4					20.3	11.9
W	.8	2.6	2.3	1.6	.4	.1						7.7	8.5
WNW	.6	.8	1.1	.1								2.6	6.0
NW	.3	.6	.6	.6	.1							2.4	8.4
NNW	.3	1.2	1.1	.2	.1							2.9	7.4
VARBL													
CALM												11.3	
	10.1	22.4	24.5	19.0	9.5	2.4	.9					100.0	8.6

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 67-76
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
DEC
NORTH
0300-0500
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.1	.6	.2								2.7	5.4
NNE	.5	.9	.5	.5								2.5	7.0
NE	.2	1.7	.5									2.5	5.3
ENE	.5	.3										.9	3.1
E	.6	.2										.9	3.0
ESE	.1	.1										.2	3.5
SE	.1	.1										.2	3.5
SSE	.4											.4	2.0
S	.5	1.5	.4									2.5	5.0
SSW	1.1	2.5	2.2	1.8	.8	.1						8.4	8.6
SW	1.5	5.4	6.9	10.0	4.2	1.7	.4	.1				30.2	11.9
WSW	1.6	4.1	4.7	6.3	1.9	1.5						20.2	11.0
W	.9	2.5	2.6	1.2	.5	.1						7.7	8.4
WNW	.6	1.8	.8									3.2	5.3
NW	.5	1.0	.6	.6	.2							3.0	8.3
NNW	.4	1.1	.8	.3								2.6	6.5
VARBL													
CALM												11.9	
	10.5	24.2	20.6	21.1	7.6	3.4	.4	.1				100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTROM AFB MT/GREAT FALLS 67-76
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
DEC
MONTH
0600-0800
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.6	1.0	.8								2.8	7.8
NNE	1.1	1.1	.3	.9	.1							3.4	7.0
NE	.9	1.0	.2									2.0	4.2
ENE	.9	.5	.1									1.5	3.5
E	.3	.2										.5	2.8
ESE	.4											.4	2.3
SE													
SSE		.1		.1								.2	8.0
S	.5	.3	.3	.1								1.3	5.1
SSW	1.0	2.3	1.3	1.9	.6	.2						7.3	9.5
SW	1.5	5.1	6.9	9.1	4.2	1.8	.3					28.9	11.8
WSW	1.0	4.0	4.9	8.1	3.5	1.6	.2					23.3	12.2
W	1.4	2.2	2.3	1.0	.2							7.0	7.1
WNW	.5	1.1	.6	.4	.2							2.9	7.0
NW	1.0	.6	.3	.5	.1							2.6	6.5
NNW	.3	.3	.8	.8								2.2	8.4
VARBL													
CALM												13.5	
	11.2	19.4	19.0	23.7	9.0	3.7	.5					100.0	8.7

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALNSTRQM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.3	.6	1.2	.4	.1							2.7	8.7
NNE	.9	1.3	.3	.4								2.9	5.8
NE	.6	1.2	.8	.2								2.8	6.0
ENE	.6	.9	.1									1.6	4.2
E	.1	.3	.1									.5	4.8
ESE		.1										.1	4.0
SE	.3	.1										.4	3.5
SSE	.3	.2										.5	2.8
S	.9	.5	.2									1.6	4.1
SSW	.6	1.0	1.0	2.3	1.3	.3	.1					6.6	12.2
SW	1.3	4.1	7.5	9.0	5.5	1.8	.2	.1				29.6	12.4
WSW	.3	3.0	3.3	9.4	5.3	2.8						24.1	14.0
W	1.3	1.1	2.3	1.7	.4	.3						7.1	9.3
WNW	.2	.9	.8	.5								2.4	7.4
NW	.1	1.1	1.1	.8	.2							3.2	8.6
NNW	.1	.4	.9	.4								1.8	8.8
VARBL													
CALM												12.0	
	8.1	16.8	19.5	25.2	12.8	5.3	.3	.1				100.0	9.9

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112

MALMSTROM AFB MT/GREAT FALLS

67-76

DEC

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

1200-1400

CLASS

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.8	1.2	.4								3.3	6.4
NNE	1.3	1.2	1.6	.6								4.7	6.3
NE	.9	1.4	1.0									3.2	5.3
ENE	.2	.3										.5	3.6
E	.2	.1	.1									.4	3.8
ESE	.1	.1	.1									.3	4.7
SE	.1	.3										.4	4.3
SSE		.3										.3	4.7
S	.6	.6										1.3	3.3
SSW	.5	.6	1.1	.8	1.0	.4						4.4	11.9
SW	1.1	1.6	4.6	8.6	6.3	2.4	.8	.1				25.5	14.6
WSW	.3	1.5	6.1	10.1	6.7	3.7	.6	.3				29.4	15.2
W	.4	.8	2.2	3.0	2.5	.8						7.6	13.5
WNW	.2	1.2	.9	1.0	.1							3.3	8.6
NW	.5	1.3	1.0	.5								3.3	6.6
NNW	.1	.1	1.6	.5	.3							2.7	10.8
VARBL													
CALM												7.2	
	7.6	12.3	21.4	25.6	16.9	7.2	1.4	.4				100.0	11.6

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRON AFB MT/GREAT FALLS 67-76 DEC
STATION STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
1500-1700
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	2.5	1.3	.2	.3							5.4	6.4
NNE	1.3	1.1	2.2	.4								4.9	6.3
NE	.6	1.6	.9	.1								3.2	5.6
ENE	.2	.8	.1									1.1	4.6
E	.6	.1	.1									.9	3.3
ESE	.2											.2	2.0
SE	.1	.1										.2	3.5
SSE	.5											.5	2.2
S	.5	1.0	.2									1.7	4.3
SSW	.5	1.5	1.8	1.3	.4	.3						5.9	9.7
SW	.8	3.8	4.5	8.9	4.0	1.7	.3	.1				24.1	13.0
WSW	.4	2.8	5.6	8.8	5.5	2.7	.2					26.2	13.8
W	.5	1.7	1.9	2.8	1.9	.2	.1	.1				9.4	12.2
WNW		.9	.5	.2								1.6	7.2
NW	.5	.8	1.1	.2	.1							2.7	7.1
NNW	.6	1.2	.8	.3	.5							3.4	8.3
VARBL													
CALM												8.5	
	8.7	19.7	21.0	23.3	12.8	5.2	.6	.2				100.0	10.1

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

HALNSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

1800-2000
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	2.2	.5	.6								4.6	5.8
NNE	.8	1.3	1.1	.1								3.2	5.7
NE	.6	1.2	.4	.2								2.5	5.3
ENE	.1	.4	.1									.6	5.2
E	.3	.2										.5	2.8
ESE													
SE	.1											.1	2.0
SSE	.8	.3										1.1	3.3
S	.5	2.5	.8	.1								3.9	5.3
SSW	1.3	2.0	2.7	.9	.8	.1						7.7	8.3
SW	1.4	4.5	8.3	7.5	3.2	.5	.3					25.8	10.8
WSW	.9	2.5	6.1	8.2	2.8	1.9	.4	.2				23.0	13.0
W	.5	1.7	1.4	1.7	1.0	.1						6.5	10.2
WNW	.2	.9	.8	.6								2.5	8.0
NW	.5	.4	1.1	.6								2.7	7.6
NNW	.4	.3	1.2	1.0	.1							3.0	9.1
VARBL													
CALM												12.3	
	9.8	20.4	24.4	21.6	7.8	2.7	.8	.2				100.0	8.6

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.9	1.4	.3								3.5	6.3
NNE	1.0	1.0	.9	.3	.1							3.2	6.2
NE	.2	.8	.9									1.8	6.2
ENE	.4	.2		.1								.8	4.1
E		.1										.1	4.0
ESE	.2											.2	1.5
SE	.1	.1										.2	3.0
SSE	.4	.3										.8	3.1
S	.8	1.1	.3	.1	.1							2.4	5.7
SSW	.9	2.9	1.9	2.0	.6	.2						8.6	9.1
SW	1.7	5.7	8.2	8.8	3.7	1.6	.2					29.9	11.1
WSW	1.5	3.1	5.3	4.9	2.8	1.5	.5	.1				19.8	12.2
W	.5	2.3	2.3	2.4	1.0	.2						8.6	9.8
WNW	.2	1.0	1.3	.3								2.8	7.3
NW	.4	.9	.8	.2	.1							2.4	7.5
NNW	.3	.6	1.4	.8	.1							3.3	9.1
VARBL													
CALM												11.6	
	9.7	20.9	24.5	20.3	8.5	3.7	.8	.1				100.0	8.8

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTRON AFB MT/GREAT FALLS 67-76 DEC
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
ALL
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	1.3	1.1	.4	.1							3.7	6.6
NNE	1.0	1.2	.9	.4	.0							3.5	6.2
NE	.6	1.2	.7	.1								2.5	5.4
ENE	.4	.5	.1	.0								1.0	3.0
E	.3	.2	.0									.5	3.3
ESE	.2	.0	.0									.2	2.8
SE	.1	.1										.2	3.5
SSE	.3	.2	.0	.0								.6	3.5
S	.7	1.1	.3	.0	.0							2.1	4.7
SSW	.9	1.9	1.7	1.7	.8	.3	.0					7.2	9.6
SW	1.3	4.5	7.0	8.8	4.5	1.0	.4	.1				28.0	12.1
WSW	.9	3.1	5.2	7.7	4.0	2.1	.3	.1				23.3	13.1
W	.8	1.8	2.1	1.9	1.0	.2	.0	.0				7.4	10.1
WNW	.3	1.0	.8	.4	.0							2.7	7.1
NW	.5	.8	.8	.5	.1							2.8	7.6
NNW	.3	.7	1.0	.5	.1	.0						2.7	8.6
VARBL													
CALM												11.0	
	9.5	19.5	21.9	22.5	10.6	4.2	.7	.1				100.0	9.3

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MARMSTROM AFB MT/GREAT FALLS 67-77
STATION STATION NAME YEARS
ALL WEATHER
CLASS
ALL
HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.3	1.2	.8	.1	.0	.0					4.2	7.4
NNE	1.0	1.6	1.2	.7	.1	.0	.0					4.6	7.0
NE	.9	1.5	1.1	.5	.1	.0						4.0	6.6
ENE	.6	.9	.5	.2	.0	.0						2.2	5.7
E	.6	.6	.3	.1	.0	.0						1.6	5.1
ESE	.3	.3	.2	.1	.0							.9	5.6
SE	.4	.4	.2	.1	.0	.0						1.1	5.5
SSE	.5	.5	.2	.0	.0							1.4	4.7
S	1.2	1.8	.6	.2	.0							4.0	5.2
SSW	1.2	2.5	1.5	1.0	.3	.1	.0					6.7	7.4
SW	1.5	4.0	5.3	4.5	1.5	.5	.1	.0				17.6	9.9
WSW	1.0	3.0	4.3	5.5	2.3	1.0	.2	.0				17.3	11.7
W	1.1	2.7	3.1	2.8	1.1	.4	.1	.0				11.3	10.0
WNW	.6	1.1	1.1	.6	.1	.0	.0	.0				3.6	7.8
NW	.6	.9	.8	.4	.1	.0	.0					2.8	7.2
NNW	.5	.8	.8	.5	.1	.0	.0					2.8	7.5
VARBL													
CALM												14.0	
	12.0	23.9	22.6	17.9	6.0	2.2	.3	.0				100.0	7.6

TOTAL NUMBER OF OBSERVATIONS 87665

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

24112 MALMSTROM AFB MT/GREAT FALLS 67-77
STATION STATION NAME YEARS
INSTRUMENT
CLASS
CIG 200 TO 1400 FT W/ VSBY 1/2 MI OR MORE,
CONDITION
AND/OR VSBY 1/2 TO 2-1/2 MI W/CIG 200 FT OR MORE
ALL
MONTH
ALL
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.7	4.1	5.5	4.3	.9	.3						16.7	9.2
NNE	2.1	5.5	5.3	4.2	1.1	.1	.0					18.3	8.5
NE	1.4	3.6	3.2	2.3	.3	.0						10.8	7.9
ENE	.7	1.3	.8	.3	.1	.1						3.3	6.5
E	.5	.7	.1	.0								1.3	4.3
ESE	.2	.4	.1									.8	4.5
SE	.2	.1	.1									.4	4.3
SSE	.2	.1	.0									.3	3.8
S	.2	.1	.0									.4	3.3
SSW	.5	.2	.0	.1	.0							.8	4.3
SW	.9	.7	.5	.2	.1	.1						2.4	6.7
WSW	.5	.9	.8	.8	.2	.0	.0					3.2	8.8
W	.8	1.5	1.6	1.0	.0	.0						4.9	7.5
WNW	.6	1.9	1.8	.7	.2	.0						5.2	7.8
NW	.9	2.2	2.4	1.4	.2	.0						7.2	8.0
NNW	1.3	2.7	3.5	2.7	.4	.1						10.7	8.6
VARBL													
CALM												13.4	
	12.8	25.8	25.7	17.9	3.7	.8	.0					100.0	7.0

TOTAL NUMBER OF OBSERVATIONS 5286

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART D CEILING VERSUS VISIBILITY

This summary is a bivariate percentage frequency distribution by classes of ceiling from zero to equal to or greater than 20,000 feet and as a separate class "no ceiling", versus visibility in 16 classes from zero to equal to or greater than 10 miles. Data are derived from hourly observations, and three sets of tables are presented as follows:

1. Annual - all years and all hours combined
2. By month - all years and all hours combined
3. By month - by standard 3-hour groups

Due to the cumulative nature of this presentation, it is possible to determine the percentage frequency of occurrence for any given limit of ceiling or visibility separately, or in combination of ceiling and visibility. The totals progress to the right and downward. Ceiling may be determined independently by referring to totals in the extreme right hand column. Also, visibility may be determined independently by reference to the horizontal row of totals at the bottom of the page. The percentage frequency for which the station was meeting or exceeding any given set of minima may be determined from the figure at the intersection of the appropriate ceiling column and visibility row. Several examples in the use of these tables are shown on pages 2 and 3 below.

U. S. Weather Bureau and Navy stations did not report ceilings within the range 10,000 feet and higher prior to January 1949. Summaries prepared from data for these stations using the earlier period and data subsequent to January 1949 will be modified to limit ceilings to 10,000 feet. Short periods of record prior to 1949 for these stations will be eliminated from the summary. For Air Force stations, the "no ceiling" category includes clear and scattered conditions, and ceilings above 20,000 feet for period through June 1948. Beginning in July 1948 for Air Force stations and January 1949 for USWB and U. S. Navy stations the "no ceiling" category consists of observations with less than 6/10 total sky cover and those cases where total sky cover is 6/10 or more, but not more than 1/2 of the sky cover is opaque.

Beginning in January 1968, METAR stations report visibilities to 6 miles and then greater than 6 miles. Thus, for METAR stations, the category equal to or greater than 10 miles is not printed in the tables, unless the summary was for a period ending before January 1968.

Continued on Reverse Side

EXAMPLES FOR USE OF CEILING VERSUS VISIBILITY TABLES IN THIS TABULATION

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	$\geq 2\frac{1}{2}$	≥ 2	$\geq 1\frac{1}{2}$	$\geq 1\frac{1}{4}$	≥ 1	$\geq \frac{3}{4}$	$\geq \frac{1}{2}$	$\geq \frac{1}{4}$	$\geq \frac{1}{8}$	$\geq \frac{1}{16}$	≥ 0
NO CEILING																
≥ 1800																
≥ 1500					91.0											92.6
≥ 1200																
≥ 1000																
≥ 900																
≥ 800																
≥ 700																
≥ 600																
≥ 500										97.4						98.1
≥ 400																
≥ 300																
≥ 200																
≥ 100																
≥ 0					95.4		96.9			98.3						100.0

EXAMPLE # 1 Read ceiling values independently of visibility under column at right headed ≥ 0 .
For instance, from the table: Ceiling ≥ 1500 feet = 92.6%.
Ceiling ≥ 500 feet = 98.1%.

EXAMPLE # 2 Read visibilities independently of ceilings on bottom line opposite ≥ 0 . From the table:
Visibility ≥ 3 miles = 95.4%.
Visibility ≥ 2 miles = 96.9%.
Visibility ≥ 1 mile = 98.3%.

EXAMPLE # 3 To obtain combinations of ceiling with visibility, read figure at intersection of the two categories; i.e.: Ceiling ≥ 1500 feet with visibility ≥ 3 miles = 91.0%.

ADDITIONAL EXAMPLES

EXAMPLE # 4

Values below minimums stated in the table may be obtained by subtracting the value given in the table from 100%.

Thus, to obtain the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles, subtract the value read from the table at the intersection, which is 91.0, from 100.0. The answer 9.0 is the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles.

Likewise, the percentage of observations with ceiling < 500 feet and/or visibility < 1 mile is 2.6, obtained by subtracting 97.4 from 100.0.

EXAMPLE # 5

To find the percentage of observations falling within the two categories given in example above, subtract the value read from the table for the first set of limits from the value in the table for the second set of limits. The difference will be the percentage of observations meeting the lower set of limits, but not meeting the higher set of limits.

The value 91.0 read from the table at the intersection of ≥ 1500 feet with ≥ 3 miles, subtracted from 97.4 read from the table at the intersection of ≥ 500 feet with ≥ 1 mile is equal to 6.4%. Thus; 6.4 percent of the observations meet the criteria: "ceiling ≥ 500 feet with visibility > 1 mile, but < 3 miles; or ceiling ≥ 500 feet, but < 1500 feet with visibility ≥ 1 mile."

Since these tabulations are prepared in several ways including by month, by 3-hour groups it is possible to determine diurnal variations of ceiling and visibility limits as well as probabilities of various ceiling-visibility combinations.

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥0	
NO CEILING	29.5	42.5	42.8	42.9	43.4	43.8	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.1
≥ 20000	34.5	52.7	53.1	53.2	53.9	54.2	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.6
≥ 18000	34.5	52.7	53.1	53.2	53.9	54.2	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.6
≥ 16000	34.5	52.7	53.1	53.2	53.9	54.2	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.6
≥ 14000	35.2	53.5	54.0	54.1	54.7	55.1	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.5
≥ 12000	38.4	58.2	58.7	58.8	59.5	59.8	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.2
≥ 10000	46.5	67.5	68.2	68.3	69.0	69.4	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.9
≥ 9000	46.9	68.4	69.0	69.1	69.9	70.2	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.8
≥ 8000	48.9	71.2	71.9	72.0	72.8	73.1	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.7
≥ 7000	49.7	72.8	73.7	73.8	74.5	74.8	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.4
≥ 6000	50.3	73.9	74.7	74.8	75.6	75.9	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.5
≥ 5000	51.8	75.6	77.0	77.1	77.8	78.2	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.7
≥ 4500	52.0	76.2	77.8	78.0	78.7	79.0	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.6
≥ 4000	53.4	79.2	81.0	81.1	81.9	82.3	83.0	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.3
≥ 3500	53.8	80.0	81.7	81.8	83.1	83.4	84.2	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.5
≥ 3000	54.4	81.4	83.7	83.9	85.5	85.9	86.9	87.1	87.1	87.4	87.4	87.4	87.4	87.4	87.4	87.5
≥ 2500	54.5	82.3	84.7	85.1	87.0	87.4	88.5	88.7	88.7	89.0	89.0	89.0	89.0	89.0	89.0	89.1
≥ 2000	54.7	83.2	86.0	86.5	88.6	89.0	90.1	90.8	90.8	91.1	91.1	91.1	91.1	91.1	91.1	91.2
≥ 1800	54.7	83.2	86.2	86.7	88.8	89.2	90.3	91.0	91.0	91.4	91.4	91.4	91.4	91.4	91.4	91.5
≥ 1500	55.2	83.9	87.0	87.4	89.6	90.0	91.2	92.3	92.3	92.7	92.7	92.7	92.7	92.7	92.7	92.8
≥ 1200	55.5	84.7	88.0	88.4	90.6	91.1	92.3	93.8	93.9	94.4	94.4	94.4	94.4	94.4	94.4	94.5
≥ 1000	55.6	84.8	88.2	88.6	91.0	91.4	92.6	94.3	94.7	95.5	95.5	95.5	95.5	95.5	95.5	95.6
≥ 900	55.6	84.8	88.2	88.6	91.2	91.6	92.9	94.9	95.5	96.2	96.3	96.3	96.3	96.3	96.3	96.5
≥ 800	55.7	84.9	88.3	88.7	91.5	91.9	93.3	95.4	95.9	96.9	97.1	97.1	97.1	97.1	97.1	97.2
≥ 700	55.8	85.2	88.5	88.9	91.7	92.2	93.7	95.9	96.5	97.5	97.8	97.8	97.8	97.8	97.8	98.0
≥ 600	55.8	85.2	88.5	88.9	91.9	92.4	93.9	96.1	96.7	98.2	98.5	98.5	98.5	98.5	98.5	98.6
≥ 500	55.8	85.3	88.6	89.0	92.0	92.5	94.0	96.3	97.1	98.7	99.0	99.0	99.0	99.0	99.0	99.1
≥ 400	55.8	85.3	88.6	89.0	92.0	92.5	94.0	96.3	97.2	98.9	99.2	99.5	99.5	99.5	99.5	99.6
≥ 300	55.8	85.3	88.6	89.0	92.0	92.5	94.0	96.3	97.2	98.9	99.2	99.5	99.5	99.5	99.5	99.6
≥ 200	55.8	85.3	88.6	89.0	92.0	92.5	94.1	96.5	97.3	99.0	99.4	99.7	99.8	99.8	99.8	99.9
≥ 100	55.8	85.3	88.6	89.0	92.0	92.5	94.1	96.5	97.3	99.0	99.4	99.7	99.8	99.8	99.8	99.9
≥ 0	55.8	85.3	88.6	89.0	92.0	92.5	94.1	96.5	97.3	99.0	99.4	99.7	99.8	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥¾	≥½	≥5/16	≥¼	≥0
NO CEILING	28.6	41.8	42.3	42.4	42.8	43.2	43.3	43.3	43.3	43.3	43.4	43.4	43.4	43.4	43.4	43.4
IV 20000	35.8	54.3	54.7	54.8	55.4	55.8	56.0	56.0	56.0	56.0	56.1	56.1	56.1	56.1	56.1	56.1
IV 18000	35.8	54.3	54.7	54.8	55.4	55.8	56.0	56.0	56.0	56.0	56.1	56.1	56.1	56.1	56.1	56.1
IV 16000	35.8	54.3	54.7	54.8	55.4	55.8	56.0	56.0	56.0	56.0	56.1	56.1	56.1	56.1	56.1	56.1
IV 14000	36.2	54.7	55.2	55.3	55.8	56.2	56.5	56.5	56.5	56.5	56.6	56.6	56.6	56.6	56.6	56.6
IV 12000	38.7	57.7	58.2	58.3	58.9	59.5	59.7	59.7	59.7	59.7	59.8	59.8	59.8	59.8	59.8	59.8
IV 10000	45.8	65.9	66.7	66.8	67.4	68.0	68.5	68.5	68.5	68.5	68.6	68.6	68.6	68.6	68.6	68.6
IV 9000	46.2	67.1	67.8	68.0	68.6	69.1	69.7	69.7	69.7	69.7	69.8	69.8	69.8	69.8	69.8	69.8
IV 8000	47.8	69.5	70.2	70.3	71.0	71.5	72.0	72.0	72.0	72.0	72.2	72.2	72.2	72.2	72.2	72.2
IV 7000	48.8	70.5	71.3	71.4	72.0	72.6	73.1	73.1	73.1	73.1	73.2	73.2	73.2	73.2	73.2	73.2
IV 6000	49.2	71.7	72.5	72.6	73.2	73.8	74.3	74.3	74.3	74.3	74.4	74.4	74.4	74.4	74.4	74.4
IV 5000	51.1	74.2	74.9	75.2	75.9	76.5	77.0	77.0	77.0	77.0	77.1	77.1	77.1	77.1	77.1	77.1
IV 4500	51.6	75.3	76.1	76.3	77.1	77.6	78.2	78.2	78.2	78.2	78.3	78.3	78.3	78.3	78.3	78.3
IV 4000	52.5	77.3	78.2	78.6	79.7	80.2	81.1	81.2	81.2	81.2	81.5	81.5	81.5	81.5	81.5	81.5
IV 3500	53.0	79.1	80.1	80.5	81.6	82.2	83.0	83.1	83.1	83.1	83.4	83.4	83.4	83.4	83.4	83.4
IV 3000	53.5	80.5	81.8	82.4	83.4	84.1	85.1	85.4	85.4	85.4	85.8	85.8	85.8	85.8	85.8	85.8
IV 2500	53.5	80.8	82.0	82.6	83.9	84.6	85.7	86.0	86.0	86.0	86.5	86.5	86.5	86.5	86.5	86.5
IV 2000	54.5	82.0	83.9	84.4	86.2	87.1	88.5	88.9	88.9	88.9	89.4	89.4	89.4	89.4	89.5	89.5
IV 1800	54.5	82.3	84.3	84.8	86.7	87.7	89.1	89.6	89.6	89.6	90.0	90.0	90.0	90.0	90.1	90.1
IV 1500	55.1	82.9	85.4	85.9	88.0	89.0	90.6	91.4	91.4	91.4	91.8	91.8	91.8	91.8	91.9	91.9
IV 1200	55.4	83.4	85.9	86.6	88.8	89.9	91.5	93.1	93.1	93.1	93.5	93.5	93.5	93.5	93.7	93.7
IV 1000	55.5	84.0	86.7	87.3	89.7	90.8	92.5	94.3	94.3	94.4	94.8	94.8	94.8	94.9	95.1	95.1
IV 900	55.7	84.2	86.9	87.5	89.9	91.0	92.7	94.6	94.6	94.7	95.2	95.2	95.3	95.3	95.4	95.4
IV 800	55.7	84.2	86.9	87.5	89.9	91.0	92.7	95.1	95.3	95.5	96.0	96.0	96.1	96.1	96.3	96.3
IV 700	55.9	84.4	87.1	87.7	90.2	91.3	93.0	95.5	95.7	95.9	96.5	96.5	96.7	96.7	97.0	97.0
IV 600	56.1	84.8	87.5	88.2	90.6	91.7	93.4	96.1	96.3	97.1	97.7	97.7	98.0	98.0	98.3	98.3
IV 500	56.3	85.2	87.8	88.5	91.0	92.0	93.8	96.6	96.9	97.7	98.4	98.4	98.6	98.6	98.9	98.9
IV 400	56.3	85.2	87.8	88.5	91.0	92.0	93.8	96.7	97.0	97.8	98.5	98.5	98.7	98.7	99.1	99.1
IV 300	56.3	85.2	87.8	88.5	91.1	92.2	93.9	96.8	97.2	98.1	98.9	98.9	99.1	99.1	99.6	99.8
IV 200	56.3	85.2	87.8	88.5	91.1	92.2	93.9	96.8	97.2	98.1	98.9	98.9	99.1	99.1	99.6	99.8
IV 100	56.3	85.2	87.8	88.5	91.2	92.3	94.0	96.9	97.3	98.2	99.0	99.0	99.2	99.2	99.7	99.9
IV 0	56.3	85.2	87.8	88.5	91.2	92.3	94.0	96.9	97.3	98.2	99.0	99.0	99.2	99.2	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTRUM AFB MT/GREAT FALLS 68-77 JAN

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	32.4	40.0	40.3	40.3	40.5	40.8	40.9	41.0	41.1	41.4	41.5	41.5	41.6	41.6	41.9	41.9
≥ 20000	40.9	53.1	53.7	53.8	54.0	54.3	54.4	54.5	54.6	54.9	55.1	55.1	55.2	55.2	55.5	55.5
≥ 18000	40.9	53.1	53.7	53.8	54.0	54.3	54.4	54.5	54.6	54.9	55.1	55.1	55.2	55.2	55.5	55.5
≥ 16000	40.9	53.1	53.7	53.8	54.0	54.3	54.4	54.5	54.6	54.9	55.1	55.1	55.2	55.2	55.5	55.5
≥ 14000	41.0	53.2	53.8	53.9	54.1	54.4	54.5	54.6	54.7	55.1	55.2	55.2	55.3	55.3	55.6	55.6
≥ 12000	43.8	56.3	56.9	57.0	57.2	57.5	57.6	57.7	57.8	58.2	58.3	58.3	58.4	58.4	58.7	58.7
≥ 10000	48.5	61.8	62.4	62.5	62.9	63.2	63.4	63.5	63.7	64.0	64.1	64.1	64.2	64.2	64.5	64.5
≥ 9000	49.2	63.3	63.9	64.0	64.5	64.8	65.2	65.3	65.4	65.7	65.8	65.8	65.9	65.9	66.2	66.2
≥ 8000	51.5	65.9	66.5	66.6	67.2	67.5	67.8	68.0	68.1	68.4	68.5	68.5	68.6	68.6	68.9	68.9
≥ 7000	52.9	67.6	68.2	68.3	68.9	69.2	69.6	69.7	69.8	70.1	70.2	70.2	70.3	70.3	70.6	70.6
≥ 6000	54.5	70.2	70.8	70.9	71.5	71.8	72.2	72.3	72.4	72.7	72.8	72.8	72.9	72.9	73.2	73.2
≥ 5000	57.2	73.1	73.7	73.8	74.4	74.7	75.1	75.2	75.3	75.6	75.7	75.7	75.8	75.8	76.1	76.1
≥ 4500	58.3	74.8	75.4	75.6	76.2	76.6	76.9	77.0	77.1	77.4	77.5	77.5	77.6	77.6	78.0	78.0
≥ 4000	60.2	78.0	78.8	79.1	79.8	80.1	80.6	81.0	81.1	81.5	81.7	81.7	81.8	81.8	82.2	82.2
≥ 3500	60.8	79.2	80.3	80.6	81.6	81.9	82.7	83.0	83.1	83.5	83.8	83.8	83.9	83.9	84.2	84.2
≥ 3000	61.0	80.4	81.7	82.2	83.5	84.0	84.7	85.1	85.2	85.6	85.8	85.8	85.9	85.9	86.2	86.2
≥ 2500	61.4	81.0	82.5	82.9	84.5	84.9	85.8	86.1	86.2	86.7	86.9	86.9	87.0	87.0	87.3	87.3
≥ 2000	61.8	81.8	83.3	83.9	85.8	86.3	87.7	88.3	88.5	88.9	89.1	89.1	89.2	89.2	89.6	89.6
≥ 1800	62.0	82.2	83.8	84.3	86.2	86.8	88.2	88.7	88.9	89.4	89.6	89.6	89.7	89.7	90.0	90.0
≥ 1500	62.2	82.6	84.3	84.8	87.3	87.8	89.5	90.1	90.3	90.8	91.0	91.0	91.1	91.1	91.4	91.4
≥ 1200	62.2	82.6	84.4	84.9	87.5	88.3	89.9	90.6	90.9	91.4	91.6	91.6	91.7	91.7	92.2	92.2
≥ 1000	62.3	82.9	84.8	85.5	88.5	89.4	91.1	91.9	92.2	92.9	93.1	93.1	93.2	93.2	93.7	93.7
≥ 900	62.3	83.0	84.9	85.6	88.6	89.5	91.2	92.0	92.3	93.1	93.3	93.3	93.4	93.4	93.9	93.9
≥ 800	62.4	83.2	85.2	85.8	88.8	89.7	91.4	92.5	92.8	93.7	94.0	94.2	94.3	94.3	94.7	94.7
≥ 700	62.8	83.8	85.7	86.5	89.5	90.3	92.2	93.3	93.7	94.5	94.9	95.2	95.3	95.3	95.7	95.7
≥ 600	62.8	83.8	85.7	86.5	89.5	90.3	92.2	93.9	94.2	95.4	95.9	96.1	96.3	96.3	96.8	96.8
≥ 500	62.9	83.9	85.8	86.6	89.6	90.5	92.4	94.1	94.4	95.6	96.3	96.6	96.9	97.0	97.5	97.5
≥ 400	63.2	84.2	86.1	86.9	90.0	91.1	92.9	94.7	95.2	96.5	97.3	97.5	98.0	98.1	98.6	98.6
≥ 300	63.2	84.4	86.3	87.1	90.2	91.4	93.2	95.1	95.5	96.9	97.7	98.0	98.5	98.6	99.1	99.1
≥ 200	63.2	84.4	86.3	87.1	90.2	91.5	93.3	95.2	95.6	97.1	98.0	98.2	98.9	99.0	99.6	99.6
≥ 100	63.2	84.4	86.3	87.1	90.2	91.5	93.3	95.2	95.6	97.2	98.2	98.4	99.2	99.4	100.0	100.0
≥ 0	63.2	84.4	86.3	87.1	90.2	91.5	93.3	95.2	95.6	97.2	98.2	98.4	99.2	99.4	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS-UT 5 FT

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥¾	≥½	≥5/16	≥¼	≥0
NO CEILING	34.4	35.2	35.8	35.8	36.2	36.5	36.6	37.1	37.1	37.3	37.4	37.4	37.5	37.5	37.7	37.7
≥ 20000	43.3	44.3	45.2	45.2	45.7	45.9	46.0	46.6	46.6	46.8	46.9	46.9	47.0	47.0	47.2	47.2
≥ 18000	43.7	44.6	45.5	45.5	46.0	46.2	46.3	46.9	46.9	47.1	47.2	47.2	47.3	47.3	47.5	47.5
≥ 16000	43.8	44.7	45.6	45.6	46.1	46.3	46.5	47.0	47.0	47.2	47.3	47.3	47.4	47.4	47.6	47.6
≥ 14000	44.8	45.8	46.7	46.7	47.2	47.4	47.5	48.1	48.1	48.3	48.4	48.4	48.5	48.5	48.7	48.7
≥ 12000	50.8	51.7	52.6	52.6	53.1	53.3	53.4	54.0	54.0	54.2	54.3	54.3	54.4	54.4	54.6	54.6
≥ 10000	60.3	61.9	62.8	62.8	63.3	63.5	63.7	64.2	64.2	64.4	64.5	64.5	64.6	64.6	64.8	64.8
≥ 9000	61.8	63.5	64.4	64.4	64.9	65.2	65.3	65.8	65.8	66.0	66.1	66.1	66.2	66.2	66.5	66.5
≥ 8000	64.5	66.3	67.4	67.4	68.1	68.3	68.5	69.0	69.0	69.2	69.4	69.4	69.5	69.5	69.7	69.7
≥ 7000	67.8	69.8	70.9	70.9	71.5	71.7	71.9	72.5	72.5	72.7	72.8	72.8	72.9	72.9	73.1	73.1
≥ 6000	71.1	73.2	74.3	74.3	75.1	75.3	75.5	76.0	76.0	76.2	76.3	76.3	76.5	76.5	76.7	76.7
≥ 5000	72.5	75.6	76.7	76.7	77.6	77.8	78.1	78.6	78.6	78.8	78.9	78.9	79.0	79.0	79.2	79.2
≥ 4500	72.6	76.2	77.4	77.4	78.5	78.7	78.9	79.5	79.5	79.7	79.8	79.8	79.9	79.9	80.1	80.1
≥ 4000	74.5	78.8	80.1	80.1	81.4	81.7	82.4	82.9	83.0	83.2	83.7	83.7	83.8	83.8	84.0	84.0
≥ 3500	74.8	79.5	80.9	81.0	82.3	82.6	83.3	83.9	84.0	84.2	84.6	84.6	84.7	84.7	84.9	84.9
≥ 3000	75.2	80.1	81.6	81.8	83.9	84.2	85.1	85.6	85.8	86.1	86.6	86.6	86.7	86.7	87.0	87.0
≥ 2500	75.5	80.5	82.0	82.3	84.6	84.9	86.1	86.8	87.0	87.3	87.7	87.7	87.8	87.8	88.2	88.2
≥ 2000	75.8	81.2	82.7	82.9	85.4	85.7	87.0	87.6	88.0	88.3	88.8	88.8	88.9	88.9	89.4	89.4
≥ 1800	75.8	81.2	82.7	82.9	85.4	85.7	87.0	87.6	88.1	88.7	89.2	89.2	89.4	89.4	89.8	89.9
≥ 1500	75.9	81.5	83.0	83.2	85.8	86.1	87.7	88.5	88.9	89.7	90.2	90.3	90.4	90.4	90.9	91.0
≥ 1200	75.9	81.6	83.2	83.5	86.3	86.7	88.4	89.1	89.8	90.8	91.3	91.4	91.5	91.5	91.9	92.0
≥ 1000	75.9	81.6	83.2	83.5	86.6	87.0	89.1	90.0	91.1	92.5	93.2	93.3	93.4	93.4	93.9	94.0
≥ 900	76.1	81.8	83.4	83.8	86.9	87.3	89.5	90.4	91.5	93.0	93.8	93.9	94.0	94.0	94.4	94.5
≥ 800	76.2	81.9	83.5	83.9	87.0	87.4	89.7	90.9	91.9	93.9	94.9	95.1	95.5	95.5	95.9	96.0
≥ 700	76.2	82.0	83.7	84.0	87.1	87.5	89.8	91.2	92.3	94.3	95.8	95.9	96.3	96.3	96.8	96.9
≥ 600	76.2	82.2	83.8	84.1	87.2	87.6	89.9	91.3	92.4	94.4	95.9	96.1	96.7	96.7	97.1	97.2
≥ 500	76.2	82.2	83.8	84.1	87.2	87.6	90.0	91.6	92.7	94.8	96.5	96.8	97.6	97.6	98.2	98.3
≥ 400	76.5	82.4	84.0	84.3	87.5	88.0	90.5	92.2	93.4	95.7	97.4	97.7	98.7	98.8	99.4	99.6
≥ 300	76.6	82.5	84.1	84.4	87.6	88.1	90.6	92.3	93.5	95.8	97.6	98.0	98.9	99.0	99.6	99.8
≥ 200	76.6	82.5	84.1	84.4	87.6	88.1	90.6	92.3	93.5	95.8	97.6	98.0	98.9	99.2	99.8	100.0
≥ 100	76.6	82.5	84.1	84.4	87.6	88.1	90.6	92.3	93.5	95.8	97.6	98.0	98.9	99.2	99.8	100.0
≥ 0	76.6	82.5	84.1	84.4	87.6	88.1	90.6	92.3	93.5	95.8	97.6	98.0	98.9	99.2	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

08-77
YEARS

JAN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS LT

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	35.2	36.8	36.9	37.0	37.4	37.4	37.4	37.5	37.5	37.7	37.7	37.7	37.7	37.7	37.7	37.7
≥ 20000	46.2	48.8	49.1	49.2	49.9	49.9	50.0	50.1	50.1	50.4	50.4	50.4	50.4	50.4	50.4	50.4
≥ 18000	46.7	49.2	49.6	49.7	50.3	50.3	50.4	50.5	50.5	50.9	50.9	50.9	50.9	50.9	50.9	50.9
≥ 16000	46.8	49.4	49.7	49.8	50.4	50.4	50.5	50.6	50.6	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 14000	48.1	50.6	51.0	51.1	51.7	51.7	51.8	51.9	51.9	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 12000	54.9	57.7	58.1	58.2	58.8	58.8	58.9	59.0	59.0	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 10000	65.8	68.7	69.1	69.2	70.0	70.0	70.1	70.2	70.2	70.5	70.5	70.5	70.5	70.5	70.5	70.5
≥ 9000	66.8	69.8	70.2	70.3	71.1	71.1	71.2	71.3	71.3	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 8000	71.1	74.4	74.8	74.9	75.8	75.8	75.9	76.0	76.0	76.5	76.5	76.5	76.5	76.5	76.5	76.5
≥ 7000	73.0	76.5	76.9	77.0	77.8	77.8	78.0	78.2	78.2	78.6	78.6	78.6	78.6	78.6	78.6	78.6
≥ 6000	74.4	78.1	78.6	78.7	79.6	79.6	79.7	79.9	79.9	80.3	80.3	80.3	80.3	80.3	80.3	80.3
≥ 5000	75.3	79.7	80.3	80.4	81.5	81.5	81.6	81.8	81.8	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 4500	75.7	80.3	81.3	81.4	82.6	82.7	82.8	83.0	83.0	83.4	83.4	83.4	83.4	83.4	83.4	83.4
≥ 4000	76.9	82.0	83.3	83.5	85.2	85.3	85.6	86.0	86.0	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 3500	77.4	82.6	84.0	84.3	86.1	86.6	87.0	87.4	87.4	87.8	87.8	87.8	87.8	87.8	87.8	87.8
≥ 3000	78.1	83.3	84.7	85.2	87.5	88.0	88.5	89.1	89.1	89.6	89.6	89.6	89.6	89.6	89.6	89.6
≥ 2500	78.1	83.7	85.3	85.7	88.2	88.9	89.5	90.1	90.1	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 2000	78.4	84.4	86.0	86.5	89.1	90.0	90.8	91.6	91.8	92.4	92.5	92.5	92.5	92.5	92.5	92.5
≥ 1800	78.4	84.4	86.0	86.5	89.1	90.0	90.8	91.6	91.8	92.4	92.5	92.5	92.5	92.5	92.5	92.5
≥ 1500	78.4	84.6	86.2	86.8	89.6	90.8	91.6	92.8	93.2	93.9	94.0	94.2	94.2	94.2	94.2	94.2
≥ 1200	78.5	84.9	86.6	87.1	90.0	91.3	92.4	93.9	94.3	94.9	95.2	95.4	95.4	95.4	95.4	95.4
≥ 1000	78.5	84.9	86.6	87.1	90.0	91.3	92.7	94.4	95.2	96.3	96.7	96.9	96.9	96.9	96.9	96.9
≥ 900	78.5	84.9	86.6	87.2	90.1	91.4	92.8	94.6	95.4	96.7	97.0	97.3	97.3	97.4	97.4	97.4
≥ 800	78.5	84.9	86.6	87.2	90.1	91.4	92.9	94.7	95.5	97.1	97.4	97.7	97.7	97.8	97.8	97.8
≥ 700	78.5	84.9	86.7	87.3	90.3	91.6	93.1	94.9	95.7	97.4	97.8	98.3	98.3	98.4	98.4	98.4
≥ 600	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.8	97.5	98.0	98.6	98.7	98.8	98.8	98.8
≥ 500	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.8	97.6	98.1	98.9	99.0	99.1	99.4	99.4
≥ 400	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.8	97.6	98.2	99.0	99.1	99.2	99.7	99.8
≥ 300	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.9	97.7	98.3	99.2	99.4	99.5	99.9	100.0
≥ 200	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.9	97.7	98.3	99.2	99.4	99.5	99.9	100.0
≥ 100	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.9	97.7	98.3	99.2	99.4	99.5	99.9	100.0
≥ 0	78.5	84.9	86.7	87.3	90.3	91.6	93.1	95.1	95.9	97.7	98.3	99.2	99.4	99.5	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	36.2	37.8	38.3	38.3	38.6	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
≥ 20000	46.7	49.2	49.9	49.9	50.2	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
≥ 18000	46.9	49.6	50.2	50.2	50.5	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
≥ 16000	47.0	49.7	50.3	50.3	50.6	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
≥ 14000	49.9	52.6	53.2	53.2	53.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
≥ 12000	57.5	60.3	61.0	61.0	61.3	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
≥ 10000	67.6	70.8	71.6	71.6	71.9	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 9000	69.1	72.7	73.7	73.7	74.0	74.1	74.1	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 8000	71.5	75.4	76.6	76.6	76.9	77.0	77.0	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
≥ 7000	73.5	77.6	78.8	78.8	79.1	79.2	79.2	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 6000	75.7	79.8	81.0	81.0	81.3	81.5	81.6	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 5000	77.5	81.8	83.1	83.1	83.8	84.1	84.2	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
≥ 4500	77.7	82.3	83.7	83.7	84.3	84.6	84.9	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 4000	78.6	84.2	85.6	85.6	86.2	86.9	87.3	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 3500	79.1	85.3	86.7	86.7	87.4	88.3	88.7	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 3000	79.1	85.8	87.3	87.3	88.4	89.6	90.0	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 2500	79.4	86.1	87.6	87.6	88.7	89.9	90.4	90.9	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1
≥ 2000	79.8	86.8	88.3	88.4	90.1	91.4	92.0	92.6	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9
≥ 1800	79.8	86.6	88.3	88.4	90.1	91.4	92.0	92.6	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9
≥ 1500	80.1	87.8	89.4	89.6	91.4	92.8	93.4	94.3	95.1	95.2	95.2	95.3	95.3	95.3	95.3	95.3
≥ 1200	80.3	88.5	90.1	90.4	92.4	93.8	94.4	95.5	96.2	96.3	96.5	96.7	96.7	96.7	96.7	96.7
≥ 1000	80.3	88.5	90.1	90.5	92.5	93.9	94.6	95.7	96.5	97.1	97.2	97.4	97.4	97.4	97.4	97.4
≥ 900	80.4	88.6	90.2	90.6	92.6	94.0	94.7	95.8	96.6	97.2	97.3	97.5	97.5	97.5	97.5	97.5
≥ 800	80.4	88.6	90.2	90.6	92.6	94.0	94.7	95.8	96.7	97.4	97.6	97.8	97.8	97.8	97.8	97.8
≥ 700	80.5	88.7	90.3	90.8	92.7	94.2	95.1	96.2	97.1	97.8	98.1	98.3	98.3	98.3	98.3	98.3
≥ 600	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.5	97.3	98.1	98.4	98.9	98.9	99.0	99.0	99.0
≥ 500	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.8	97.6	98.6	98.9	99.5	99.5	99.6	99.6	99.6
≥ 400	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.8	97.6	98.6	98.9	99.5	99.5	99.6	99.6	99.6
≥ 300	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.8	97.6	98.6	98.9	99.5	99.5	99.7	99.8	99.8
≥ 200	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.8	97.6	98.6	98.9	99.5	99.5	99.7	99.8	99.8
≥ 100	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.8	97.6	98.6	98.9	99.5	99.5	99.7	99.8	99.8
≥ 0	80.5	88.8	90.4	90.9	92.8	94.3	95.3	96.8	97.6	98.6	98.9	99.5	99.5	99.7	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

JAN

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS (EST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	29.1	40.5	41.1	41.1	41.1	41.2	41.2	41.2	41.3	41.3	41.3	41.3	41.3	41.3	41.4	41.4
≥ 20000	35.5	52.0	52.7	52.8	52.8	52.9	52.9	52.9	53.0	53.0	53.0	53.0	53.0	53.0	53.1	53.1
≥ 18000	35.5	52.0	52.7	52.8	52.8	52.9	52.9	52.9	53.0	53.0	53.0	53.0	53.0	53.0	53.1	53.1
≥ 16000	35.5	52.0	52.7	52.8	52.8	52.9	52.9	52.9	53.0	53.0	53.0	53.0	53.0	53.0	53.1	53.1
≥ 14000	36.2	52.9	53.5	53.7	53.7	53.8	53.8	53.8	53.9	53.9	53.9	53.9	53.9	53.9	54.0	54.0
≥ 12000	41.1	59.0	59.7	59.8	59.8	59.9	59.9	59.9	60.0	60.0	60.0	60.0	60.0	60.0	60.1	60.1
≥ 10000	48.6	69.9	70.6	70.8	70.8	70.9	70.9	70.9	71.0	71.0	71.0	71.0	71.0	71.0	71.1	71.1
≥ 9000	49.4	71.0	71.7	71.8	71.8	71.9	72.0	72.0	72.2	72.2	72.2	72.2	72.2	72.2	72.3	72.3
≥ 8000	51.1	73.4	74.2	74.3	74.3	74.4	74.5	74.5	74.6	74.6	74.6	74.6	74.6	74.6	74.7	74.7
≥ 7000	52.9	75.7	76.5	76.6	76.6	76.8	76.9	77.0	77.1	77.1	77.1	77.1	77.1	77.1	77.2	77.2
≥ 6000	54.2	77.0	77.7	77.8	77.8	78.3	78.4	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.7	78.7
≥ 5000	55.7	79.4	80.2	80.3	80.3	80.8	80.9	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.3	81.3
≥ 4500	55.7	79.6	80.4	80.5	80.6	81.1	81.2	81.4	81.5	81.5	81.5	81.5	81.5	81.5	81.6	81.6
≥ 4000	57.2	82.2	83.2	83.4	83.5	84.1	84.2	84.5	84.6	84.6	84.6	84.6	84.6	84.6	84.7	84.7
≥ 3500	58.1	84.2	85.4	85.7	85.9	86.5	86.6	86.9	87.0	87.0	87.0	87.0	87.0	87.0	87.1	87.1
≥ 3000	58.8	85.4	87.0	87.3	87.6	88.4	88.8	89.4	89.5	89.6	89.6	89.6	89.6	89.6	89.7	89.7
≥ 2500	59.0	85.8	87.4	87.7	88.2	88.9	89.4	90.0	90.2	90.3	90.3	90.3	90.3	90.3	90.4	90.4
≥ 2000	59.6	86.8	88.7	89.0	89.6	90.4	91.0	91.7	91.9	92.0	92.0	92.0	92.0	92.0	92.2	92.2
≥ 1800	59.6	86.9	88.8	89.1	89.7	90.5	91.2	91.9	92.2	92.3	92.3	92.3	92.3	92.3	92.4	92.4
≥ 1500	59.7	87.5	89.6	90.0	90.6	91.5	92.3	93.2	93.5	93.7	93.7	93.7	93.8	93.8	93.9	93.9
≥ 1200	59.7	88.8	91.0	91.4	92.2	93.1	93.9	95.1	95.4	95.5	95.5	95.5	95.6	95.6	95.7	95.7
≥ 1000	59.7	88.9	91.1	91.5	92.3	93.8	94.8	96.2	97.0	97.2	97.2	97.2	97.3	97.3	97.4	97.4
≥ 900	59.9	89.1	91.3	91.7	93.0	94.0	95.1	96.5	97.2	97.4	97.4	97.4	97.5	97.5	97.6	97.6
≥ 800	60.1	89.4	91.5	91.9	93.2	94.2	95.3	97.0	97.8	98.3	98.3	98.3	98.4	98.4	98.5	98.5
≥ 700	60.1	89.5	91.6	92.0	93.4	94.4	95.5	97.2	98.1	98.5	98.5	98.5	98.6	98.6	98.7	98.7
≥ 600	60.1	89.5	91.6	92.0	93.4	94.4	95.7	97.4	98.3	99.0	99.0	99.0	99.1	99.1	99.2	99.2
≥ 500	60.1	89.5	91.7	92.2	93.5	94.5	95.8	97.5	98.5	99.2	99.5	99.5	99.7	99.7	99.9	99.9
≥ 400	60.1	89.5	91.7	92.2	93.5	94.5	95.8	97.5	98.5	99.2	99.5	99.5	99.7	99.7	99.9	99.9
≥ 300	60.1	89.5	91.7	92.2	93.5	94.5	95.8	97.5	98.5	99.2	99.5	99.5	99.7	99.7	99.9	99.9
≥ 200	60.1	89.5	91.7	92.2	93.5	94.5	95.8	97.5	98.5	99.2	99.5	99.5	99.7	99.7	99.9	99.9
≥ 100	60.1	89.5	91.7	92.2	93.5	94.5	95.8	97.5	98.5	99.2	99.5	99.5	99.7	99.7	99.9	99.9
≥ 0	60.1	89.5	91.7	92.2	93.5	94.5	95.8	97.5	98.5	99.2	99.5	99.5	99.7	99.7	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

JAN

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	≥5/16	¼	≥0
NO CEILING ≥ 20000	27.4	40.4	40.8	40.8	40.8	40.9	41.2	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.4	41.4
IV 18000	33.4	51.8	52.7	52.7	52.9	53.0	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.5	53.5
IV 16000	33.5	51.9	52.8	52.8	53.0	53.1	53.4	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.7	53.7
IV 14000	33.7	52.0	52.9	52.9	53.1	53.2	53.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.8	53.8
IV 12000	38.0	57.4	58.5	58.6	58.8	58.9	59.2	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.6	59.6
IV 10000	45.8	67.7	68.9	69.0	69.2	69.4	69.7	69.8	69.8	69.8	69.8	69.8	69.8	69.8	70.0	70.0
IV 9000	46.3	68.6	69.8	69.9	70.1	70.2	70.5	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.9	70.9
IV 8000	49.0	71.8	73.0	73.1	73.4	73.5	73.9	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.2	74.2
IV 7000	50.6	73.9	75.1	75.2	75.5	75.6	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.2	76.2
IV 6000	52.2	75.5	76.7	76.8	77.1	77.2	77.5	77.7	77.7	77.7	77.7	77.7	77.7	77.7	78.0	78.0
IV 5000	53.5	77.5	78.8	78.9	79.4	79.5	79.9	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.3	80.3
IV 4500	53.8	78.0	79.2	79.4	79.8	79.9	80.3	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.8	80.8
IV 4000	55.6	81.5	82.9	83.1	83.8	84.0	84.5	84.8	84.8	84.8	84.8	84.8	84.8	84.8	85.1	85.1
IV 3500	55.0	82.2	83.5	83.8	84.6	84.8	85.4	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.9	85.9
IV 3000	56.7	83.2	84.9	85.2	86.1	86.3	87.0	87.4	87.4	87.4	87.4	87.4	87.4	87.5	87.7	87.7
IV 2500	57.1	84.1	86.0	86.2	87.4	87.8	88.5	89.0	89.0	89.0	89.0	89.1	89.1	89.1	89.4	89.4
IV 2000	57.6	85.4	87.5	87.7	89.1	89.7	90.4	91.1	91.1	91.2	91.2	91.3	91.3	91.3	91.5	91.5
IV 1800	58.1	85.8	88.0	88.2	89.6	90.1	90.9	91.5	91.6	91.7	91.8	91.8	91.8	91.8	92.0	92.0
IV 1500	58.1	86.2	88.4	88.7	90.4	91.1	91.8	92.8	93.0	93.2	93.3	93.3	93.3	93.3	93.5	93.5
IV 1200	58.5	87.5	89.7	90.0	91.8	92.6	93.3	94.3	94.7	95.1	95.2	95.2	95.2	95.2	95.4	95.4
IV 1000	58.5	87.5	89.7	90.0	92.2	92.9	93.7	94.7	95.3	95.6	95.7	95.7	95.7	95.7	95.9	95.9
IV 900	58.6	87.7	89.9	90.2	92.4	93.2	94.0	95.2	95.7	96.1	96.2	96.2	96.2	96.2	96.5	96.5
IV 800	58.7	88.0	90.1	90.4	92.6	93.4	94.2	95.6	96.2	97.0	97.1	97.2	97.2	97.2	97.4	97.4
IV 700	58.7	88.0	90.1	90.4	92.6	93.4	94.3	95.7	96.3	97.2	97.4	97.5	97.5	97.6	97.8	97.8
IV 600	58.7	88.0	90.1	90.4	92.6	93.5	94.5	96.0	96.3	98.0	98.4	98.5	98.6	98.6	98.8	98.8
IV 500	58.7	88.0	90.1	90.4	92.6	93.5	94.5	96.1	97.0	98.3	98.7	98.8	98.8	98.9	99.1	99.1
IV 400	58.7	88.0	90.1	90.4	92.6	93.5	94.5	96.1	97.0	98.3	98.7	98.8	98.8	98.9	99.1	99.1
IV 300	58.7	88.0	90.2	90.8	92.9	93.9	94.8	96.5	97.3	98.7	99.1	99.2	99.2	99.4	99.6	99.6
IV 200	58.7	88.0	90.2	90.8	92.9	93.9	94.8	96.5	97.3	98.7	99.1	99.2	99.2	99.4	99.6	99.6
IV 100	58.7	88.0	90.2	90.8	92.9	93.9	94.8	96.5	97.3	98.7	99.1	99.2	99.2	99.4	99.6	99.6
IV 0	58.7	88.0	90.2	90.8	92.9	93.9	94.8	96.5	97.3	98.7	99.1	99.2	99.2	99.4	99.6	99.6

TOTAL NUMBER OF OBSERVATIONS 930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE MAC

CEILING VERSUS VISIBILITY

24112

STATION NAME
MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

JAN

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 0	≥ 0
NO CEILING	31.6	39.4	39.8	39.8	40.1	40.3	40.4	40.5	40.5	40.6	40.7	40.7	40.7	40.7	40.8	40.8
≥ 20000	39.5	50.8	51.4	51.5	51.8	52.0	52.2	52.3	52.3	52.4	52.5	52.5	52.5	52.5	52.6	52.6
≥ 18000	39.7	50.9	51.5	51.6	52.0	52.2	52.3	52.4	52.5	52.6	52.6	52.6	52.6	52.7	52.7	52.8
IV 16000	39.7	51.0	51.6	51.6	52.0	52.2	52.4	52.5	52.5	52.6	52.7	52.7	52.7	52.7	52.8	52.8
IV 14000	40.6	51.9	52.5	52.6	53.0	53.2	53.3	53.4	53.5	53.6	53.6	53.6	53.6	53.7	53.7	53.8
IV 12000	45.4	57.3	57.9	58.0	58.4	58.6	58.8	58.9	58.9	59.0	59.1	59.1	59.1	59.1	59.2	59.2
IV 10000	53.6	66.8	67.5	67.6	68.1	68.3	68.5	68.6	68.6	68.8	68.8	68.8	68.8	68.8	68.9	69.0
IV 9000	54.5	68.1	68.8	68.9	69.4	69.6	69.8	69.9	70.0	70.1	70.1	70.1	70.1	70.2	70.3	70.3
IV 8000	56.9	71.0	71.8	71.9	72.4	72.6	72.9	73.0	73.1	73.2	73.2	73.2	73.2	73.3	73.3	73.4
IV 7000	58.7	73.1	73.9	74.0	74.5	74.7	75.0	75.1	75.2	75.3	75.3	75.3	75.3	75.4	75.5	75.5
IV 6000	60.2	74.9	75.8	75.9	76.4	76.7	76.9	77.1	77.1	77.2	77.3	77.3	77.3	77.3	77.4	77.5
IV 5000	61.8	77.1	78.1	78.2	78.8	79.1	79.4	79.6	79.6	79.7	79.8	79.8	79.8	79.8	79.9	79.9
IV 4500	62.2	77.8	78.9	79.0	79.7	80.0	80.3	80.5	80.5	80.7	80.7	80.7	80.7	80.8	80.8	80.9
IV 4000	63.6	80.4	81.6	81.8	82.7	83.1	83.6	83.9	83.9	84.1	84.2	84.2	84.2	84.3	84.3	84.4
IV 3500	64.1	81.5	82.8	83.1	84.1	84.5	85.1	85.4	85.5	85.6	85.7	85.7	85.7	85.8	85.8	85.9
IV 3000	64.6	82.5	84.1	84.4	85.8	86.3	87.0	87.4	87.5	87.7	87.8	87.8	87.9	87.9	88.0	88.0
IV 2500	64.8	83.0	84.7	85.0	86.6	87.2	88.0	88.5	88.5	88.8	88.9	88.9	88.9	89.0	89.1	89.1
IV 2000	65.3	84.0	85.8	86.2	88.0	88.7	89.7	90.3	90.5	90.7	90.9	90.9	90.9	90.9	91.1	91.1
IV 1800	65.4	84.1	86.0	86.4	88.2	88.9	89.9	90.6	90.7	91.0	91.2	91.2	91.2	91.3	91.4	91.4
IV 1500	65.6	84.6	86.7	87.1	89.1	89.9	91.0	91.9	92.2	92.6	92.7	92.8	92.8	92.8	93.0	93.0
IV 1200	65.7	85.3	87.4	87.8	90.0	90.8	92.0	93.2	93.5	93.9	94.1	94.2	94.2	94.3	94.4	94.5
IV 1000	65.8	85.4	87.5	88.0	90.4	91.3	92.6	94.0	94.5	95.2	95.4	95.5	95.6	95.6	95.7	95.8
IV 900	65.9	85.5	87.7	88.2	90.6	91.5	92.8	94.3	94.8	95.6	95.8	95.9	96.0	96.0	96.1	96.2
IV 800	66.0	85.6	87.8	88.3	90.7	91.6	93.0	94.6	95.3	96.2	96.6	96.7	96.8	96.8	97.0	97.0
IV 700	66.1	85.8	88.0	88.5	90.9	91.9	93.3	95.0	95.7	96.7	97.1	97.2	97.4	97.4	97.6	97.6
IV 600	66.1	85.9	88.0	88.5	91.0	92.0	93.5	95.3	96.0	97.2	97.7	97.9	98.1	98.2	98.3	98.4
IV 500	66.1	86.0	88.1	88.6	91.1	92.1	93.6	95.5	96.3	97.6	98.2	98.4	98.7	98.7	99.0	99.0
IV 400	66.2	86.0	88.2	88.7	91.2	92.2	93.7	95.7	96.5	97.8	98.5	98.8	99.0	99.1	99.4	99.4
IV 300	66.2	86.1	88.2	88.8	91.3	92.3	93.8	95.8	96.6	98.0	98.7	99.0	99.3	99.4	99.6	99.8
IV 200	66.2	86.1	88.2	88.8	91.3	92.3	93.9	95.8	96.6	98.0	98.7	99.0	99.4	99.5	99.8	99.9
IV 100	66.2	86.1	88.2	88.8	91.3	92.3	93.9	95.8	96.6	98.1	98.8	99.1	99.4	99.5	99.8	100.0
IV 0	66.2	86.1	88.2	88.8	91.3	92.3	93.9	95.8	96.6	98.1	98.8	99.1	99.4	99.5	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	36.9	52.9	53.2	53.2	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
≥ 20000	44.1	63.7	64.1	64.1	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 18000	44.1	63.7	64.1	64.1	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 16000	44.1	63.7	64.1	64.1	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 14000	44.5	64.2	64.5	64.5	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
≥ 12000	47.1	67.6	68.0	68.0	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
≥ 10000	52.3	74.6	75.0	75.0	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 9000	52.8	75.1	75.6	75.6	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
≥ 8000	54.9	77.4	77.9	77.9	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 7000	55.8	79.2	79.6	79.6	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
≥ 6000	56.3	79.9	80.4	80.4	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 5000	56.8	81.2	81.7	81.7	82.6	82.6	82.6	82.6	82.6	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 4500	57.0	81.5	82.1	82.1	82.9	82.9	82.9	82.9	82.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 4000	58.0	83.0	83.6	83.6	84.5	84.5	84.5	84.5	84.6	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 3500	58.5	84.2	84.9	84.9	85.7	85.7	85.7	85.7	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 3000	59.0	84.9	85.9	85.9	87.0	87.0	87.0	87.0	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 2500	59.0	85.3	86.6	86.6	87.8	87.8	87.9	87.9	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 2000	59.6	86.2	87.8	87.9	90.1	90.1	90.3	90.3	90.5	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 1800	59.7	86.3	88.0	88.1	90.5	90.6	90.8	90.8	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 1500	60.2	87.4	89.2	89.5	92.0	92.2	92.6	92.6	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 1200	60.5	88.6	90.3	90.7	93.2	93.6	94.0	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 1000	60.7	88.8	90.7	91.0	93.8	94.3	94.8	95.1	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 900	60.7	88.8	90.8	91.2	93.9	94.5	94.9	95.3	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 800	60.7	88.8	90.8	91.2	93.9	94.5	94.9	95.3	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 700	60.7	88.8	90.8	91.3	94.0	94.6	95.2	95.6	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 600	60.7	88.9	90.9	91.4	94.1	94.8	95.4	96.2	96.7	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 500	60.7	89.0	91.0	91.5	94.2	95.1	95.6	96.6	97.1	97.4	97.5	97.5	97.5	97.5	97.5	97.5
≥ 400	60.7	89.2	91.2	91.6	94.3	95.2	95.8	96.8	97.6	98.1	98.2	98.2	98.4	98.5	98.5	98.7
≥ 300	60.7	89.4	91.4	91.9	94.6	95.4	96.0	97.2	98.0	98.6	98.7	98.7	98.8	98.9	98.9	99.2
≥ 200	60.7	89.4	91.4	91.9	94.6	95.4	96.0	97.2	98.0	98.7	98.8	98.8	98.9	99.1	99.1	99.6
≥ 100	60.7	89.4	91.4	91.9	94.6	95.4	96.0	97.2	98.0	98.7	98.8	98.8	98.9	99.1	99.1	100.0
≥ 0	60.7	89.4	91.4	91.9	94.6	95.4	96.0	97.2	98.0	98.7	98.8	98.8	98.9	99.1	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	36.7	52.1	52.4	52.7	53.0	53.0	53.0	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.4	53.4
≥ 20000	42.8	61.1	61.5	61.7	62.2	62.2	62.2	62.2	62.3	62.4	62.4	62.4	62.4	62.4	62.5	62.5
≥ 18000	43.0	61.4	61.7	62.0	62.4	62.4	62.4	62.4	62.5	62.7	62.7	62.7	62.7	62.7	62.8	62.8
≥ 16000	43.0	61.4	61.7	62.0	62.4	62.4	62.4	62.4	62.5	62.7	62.7	62.7	62.7	62.7	62.8	62.8
≥ 14000	44.2	62.5	62.9	63.1	63.6	63.6	63.6	63.6	63.7	63.8	63.8	63.8	63.8	63.8	64.0	64.0
≥ 12000	48.2	66.8	67.1	67.4	67.8	67.8	67.8	67.8	68.0	68.1	68.1	68.1	68.1	68.1	68.2	68.2
≥ 10000	52.4	72.8	73.1	73.4	73.9	73.9	73.9	73.9	74.0	74.1	74.1	74.1	74.1	74.1	74.2	74.2
≥ 9000	52.8	73.9	74.2	74.4	74.9	74.9	74.9	74.9	75.0	75.1	75.1	75.1	75.1	75.1	75.3	75.3
≥ 8000	54.2	75.7	76.1	76.3	76.8	76.8	76.8	76.8	76.9	77.0	77.0	77.0	77.0	77.0	77.1	77.1
≥ 7000	55.2	77.3	77.6	77.9	78.3	78.3	78.3	78.3	78.4	78.6	78.6	78.6	78.6	78.6	78.7	78.7
≥ 6000	55.7	78.4	78.8	79.0	79.5	79.5	79.5	79.5	79.6	79.7	79.7	79.7	79.7	79.7	79.9	79.9
≥ 5000	56.9	80.2	80.6	80.8	81.3	81.3	81.3	81.3	81.4	81.5	81.5	81.5	81.5	81.5	81.6	81.6
≥ 4500	57.2	80.6	80.9	81.2	81.6	81.6	81.6	81.6	81.7	81.9	81.9	81.9	81.9	81.9	82.0	82.0
≥ 4000	58.4	82.2	82.7	82.9	83.5	83.5	83.5	83.9	84.0	84.1	84.1	84.1	84.1	84.1	84.2	84.2
≥ 3500	59.2	83.5	84.0	84.2	84.3	84.8	84.8	85.2	85.3	85.4	85.4	85.4	85.4	85.4	85.5	85.5
≥ 3000	59.8	84.3	84.9	85.2	85.7	85.7	85.7	86.1	86.2	86.3	86.3	86.3	86.3	86.3	86.5	86.5
≥ 2500	60.4	84.9	86.0	86.2	86.9	87.0	87.2	87.6	87.8	87.9	87.9	87.9	87.9	87.9	88.0	88.0
≥ 2000	61.2	86.2	87.4	87.6	88.8	89.0	89.4	90.0	90.1	90.2	90.2	90.2	90.2	90.2	90.3	90.3
≥ 1800	61.4	86.5	87.9	88.1	89.4	89.8	90.1	90.7	90.8	90.9	90.9	90.9	90.9	90.9	91.0	91.0
≥ 1500	62.2	88.2	89.8	90.0	91.4	92.0	92.5	93.1	93.2	93.4	93.4	93.4	93.4	93.4	93.5	93.5
≥ 1200	62.4	88.9	90.7	90.9	92.3	92.9	93.5	94.1	94.2	94.5	94.5	94.5	94.5	94.5	94.6	94.6
≥ 1000	62.7	89.6	91.6	91.9	93.3	93.9	94.7	95.3	95.4	95.8	95.8	95.8	95.8	95.8	95.9	95.9
≥ 900	62.7	89.6	91.6	91.9	93.3	93.9	94.7	95.3	95.4	95.8	95.8	95.8	95.8	95.8	95.9	95.9
≥ 800	62.7	89.6	91.6	91.9	93.3	93.9	94.7	95.3	95.4	95.8	95.8	95.8	95.8	95.8	95.9	95.9
≥ 700	62.7	89.6	91.6	91.9	93.3	93.9	94.7	95.3	95.4	95.8	95.8	95.8	95.8	95.8	95.9	95.9
≥ 600	62.7	89.6	91.8	92.0	93.6	94.2	95.2	96.1	96.2	96.6	96.6	96.6	96.6	96.6	96.7	96.7
≥ 500	62.7	89.8	91.9	92.1	93.8	94.5	95.4	96.5	96.8	97.3	97.3	97.3	97.4	97.4	97.5	97.6
≥ 400	62.7	89.8	91.9	92.1	93.8	94.5	95.4	96.5	96.8	97.3	97.3	97.3	97.4	97.4	97.8	97.9
≥ 300	62.8	90.0	92.1	92.3	94.0	94.7	95.6	96.7	97.2	97.6	97.8	97.8	98.0	98.0	98.4	98.7
≥ 200	62.9	90.1	92.2	92.5	94.1	94.8	95.8	96.8	97.3	98.0	98.2	98.2	98.5	98.5	99.1	99.6
≥ 100	62.9	90.1	92.2	92.5	94.1	94.8	95.8	96.8	97.3	98.0	98.2	98.2	98.5	98.5	99.1	99.6
≥ 0	62.9	90.1	92.2	92.5	94.1	94.8	95.8	96.8	97.3	98.0	98.2	98.2	98.5	98.5	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS 842

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 STATION MALMSTROM AFB MT/GREAT FALLS

68-77 YEARS

FEB MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS-(LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	38.0	45.5	46.1	46.1	46.3	46.4	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.6	46.6	46.9
≥ 20000	45.5	55.9	56.2	56.2	56.7	56.8	56.9	57.0	57.0	57.0	57.0	57.0	57.0	57.1	57.2	57.5
IV 18000	45.5	55.9	56.2	56.2	56.7	56.8	56.9	57.0	57.0	57.0	57.0	57.0	57.0	57.1	57.2	57.5
IV 16000	45.5	55.9	56.2	56.2	56.7	56.8	56.9	57.0	57.0	57.0	57.0	57.0	57.0	57.1	57.2	57.5
≥ 14000	45.8	56.3	56.5	56.5	57.0	57.1	57.2	57.4	57.4	57.4	57.4	57.4	57.4	57.5	57.6	57.8
IV 12000	51.2	61.8	62.1	62.1	62.5	62.7	62.8	62.9	62.9	62.9	62.9	62.9	62.9	63.0	63.1	63.4
IV 10000	59.6	71.6	71.8	71.8	72.4	72.6	72.7	72.8	72.8	72.8	72.8	72.8	72.8	72.9	73.0	73.3
IV 9000	60.5	72.7	73.0	73.0	73.6	73.7	73.9	74.0	74.0	74.0	74.0	74.0	74.0	74.1	74.2	74.4
≥ 8000	63.0	75.1	75.6	75.6	76.2	76.3	76.4	76.6	76.6	76.6	76.6	76.6	76.6	76.7	76.8	77.0
IV 7000	64.3	76.6	77.0	77.0	77.6	77.7	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.1	78.2	78.4
IV 6000	65.1	77.6	78.1	78.1	78.7	78.8	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.2	79.3	79.5
IV 5000	66.5	79.2	79.6	79.6	80.2	80.3	80.4	80.6	80.6	80.6	80.6	80.6	80.6	80.7	80.8	81.0
IV 4500	67.0	79.6	80.1	80.1	80.7	80.8	80.9	81.0	81.0	81.0	81.0	81.0	81.0	81.2	81.3	81.5
IV 4000	68.3	81.5	82.6	82.6	83.3	83.4	83.5	83.6	83.6	83.6	83.6	83.6	83.6	83.7	83.9	84.1
IV 3500	68.9	83.3	84.3	84.3	85.0	85.2	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.5	85.6	85.9
IV 3000	69.3	84.0	85.3	85.3	86.1	86.2	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.7	86.8	87.0
IV 2500	69.6	84.5	86.1	86.2	87.4	87.6	87.9	88.0	88.0	88.0	88.0	88.0	88.0	88.1	88.2	88.5
IV 2000	70.2	85.5	87.6	87.9	89.3	89.5	90.1	90.3	90.5	90.5	90.5	90.5	90.5	90.7	90.8	91.0
IV 1800	70.2	85.7	88.0	88.2	89.8	90.1	90.8	91.0	91.3	91.3	91.3	91.3	91.3	91.5	91.6	91.9
IV 1500	70.8	86.9	89.3	89.6	91.5	92.1	92.9	93.2	93.4	93.4	93.4	93.4	93.4	93.6	93.8	94.0
IV 1200	71.1	87.9	90.2	90.6	92.6	93.2	94.1	94.3	94.7	94.7	94.7	94.7	94.7	94.9	95.1	95.3
IV 1000	71.5	88.7	91.2	91.5	93.5	94.2	95.2	95.5	95.9	96.0	96.1	96.2	96.2	96.5	96.6	96.8
IV 900	71.5	88.8	91.3	91.5	93.8	94.5	95.4	95.8	96.1	96.2	96.3	96.5	96.7	96.8	96.8	97.1
IV 800	71.7	89.0	91.5	91.9	94.0	94.7	95.9	96.2	96.6	96.7	96.8	96.9	97.2	97.3	97.3	97.5
IV 700	71.7	89.0	91.5	91.9	94.0	94.7	96.0	96.3	96.7	96.8	96.9	97.1	97.3	97.4	97.4	97.6
IV 600	71.7	89.0	91.5	91.9	94.0	94.7	96.0	96.3	96.8	96.9	97.1	97.2	97.4	97.5	97.5	97.8
IV 500	71.7	89.0	91.5	91.9	94.0	94.7	96.0	96.3	96.8	96.9	97.1	97.2	97.4	97.5	97.6	98.0
IV 400	71.7	89.2	91.6	92.0	94.2	94.9	96.5	96.8	97.3	97.4	97.5	97.6	97.9	98.1	98.2	98.7
IV 300	71.7	89.2	91.6	92.0	94.5	95.2	96.7	97.2	97.6	97.9	98.0	98.1	98.4	98.6	98.7	99.3
IV 200	71.7	89.2	91.6	92.0	94.5	95.2	96.7	97.2	97.6	97.9	98.0	98.1	98.5	98.7	98.8	99.5
IV 100	71.7	89.2	91.6	92.0	94.5	95.2	96.7	97.2	97.6	97.9	98.0	98.1	98.5	98.7	98.8	99.6
IV 0	71.7	89.2	91.6	92.0	94.5	95.2	96.7	97.2	97.6	97.9	98.0	98.1	98.5	98.7	98.8	100.0

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	44.4	45.6	45.9	45.9	46.2	46.4	46.4	46.8	46.8	46.9	46.9	46.9	47.0	47.1	47.1	47.2
≥ 20000	52.9	54.4	54.8	54.9	55.4	55.6	55.6	56.2	56.2	56.3	56.3	56.3	56.4	56.5	56.5	56.7
≥ 18000	53.1	54.7	55.0	55.1	55.6	55.8	55.8	56.4	56.4	56.5	56.5	56.5	56.7	56.8	56.8	56.9
≥ 16000	53.1	54.7	55.0	55.1	55.6	55.8	55.8	56.4	56.4	56.5	56.5	56.5	56.7	56.8	56.8	56.9
≥ 14000	55.6	57.1	57.5	57.6	58.2	58.4	58.5	59.1	59.1	59.2	59.2	59.2	59.4	59.5	59.5	59.6
≥ 12000	60.7	62.3	62.8	62.9	63.5	63.7	63.8	64.4	64.4	64.5	64.5	64.5	64.7	64.8	64.8	64.9
≥ 10000	69.1	71.1	71.8	72.0	72.7	72.9	73.0	73.6	73.6	73.7	73.7	73.7	73.9	74.0	74.0	74.1
≥ 9000	70.2	72.2	73.0	73.1	73.9	74.1	74.2	74.8	74.8	74.9	74.9	74.9	75.0	75.1	75.1	75.3
≥ 8000	72.7	74.8	75.6	75.7	76.4	76.7	76.8	77.4	77.4	77.5	77.5	77.5	77.6	77.7	77.7	77.9
≥ 7000	73.9	76.2	77.0	77.4	78.1	78.3	78.4	79.0	79.0	79.2	79.2	79.2	79.3	79.4	79.4	79.5
≥ 6000	75.4	77.9	78.8	79.2	79.9	80.1	80.2	80.8	80.8	80.9	80.9	80.9	81.0	81.2	81.2	81.3
≥ 5000	77.6	80.2	81.2	81.5	82.2	82.4	82.6	83.2	83.2	83.4	83.4	83.4	83.5	83.6	83.6	83.7
≥ 4500	78.1	80.7	81.6	82.0	82.7	82.9	83.0	83.6	83.6	83.9	83.9	83.9	84.0	84.1	84.1	84.2
≥ 4000	79.5	82.9	84.0	84.3	85.4	85.6	85.7	86.3	86.3	86.6	86.6	86.6	86.7	86.8	86.8	86.9
≥ 3500	80.4	84.1	85.2	85.5	86.8	87.0	87.2	87.8	87.8	88.0	88.0	88.0	88.1	88.2	88.2	88.3
≥ 3000	80.4	84.7	85.7	86.1	87.5	88.2	88.3	88.9	88.9	89.2	89.2	89.2	89.4	89.5	89.5	89.6
≥ 2500	80.9	85.4	86.6	87.0	88.7	89.4	89.6	90.2	90.2	90.5	90.5	90.6	90.8	90.9	90.9	91.0
≥ 2000	81.5	86.1	87.4	87.9	89.6	90.3	90.8	91.5	91.8	92.0	92.1	92.2	92.5	92.6	92.6	92.7
≥ 1800	81.6	86.3	87.6	88.1	89.9	90.6	91.0	91.8	92.0	92.2	92.3	92.5	92.7	92.8	92.8	92.9
≥ 1500	81.6	86.3	87.9	88.3	90.5	91.5	92.0	93.1	93.3	93.5	93.6	93.8	94.0	94.1	94.1	94.2
≥ 1200	82.0	87.0	88.7	89.2	91.5	92.6	93.2	94.2	94.6	95.1	95.2	95.3	95.5	95.6	95.6	95.8
≥ 1000	82.1	87.2	88.8	89.3	91.6	92.7	93.3	94.5	94.8	95.4	95.6	95.8	96.0	96.1	96.1	96.2
≥ 900	82.1	87.2	88.8	89.3	91.6	92.7	93.3	94.5	94.8	95.4	95.8	95.9	96.1	96.2	96.2	96.3
≥ 800	82.1	87.2	88.8	89.3	91.6	92.7	93.3	94.5	94.8	95.4	95.8	95.9	96.1	96.2	96.2	96.3
≥ 700	82.1	87.2	88.8	89.3	91.8	92.8	93.5	94.7	95.1	95.8	96.3	96.6	96.9	97.2	97.2	97.3
≥ 600	82.2	87.3	88.9	89.4	91.9	92.9	93.8	94.9	95.3	96.1	96.7	97.1	97.6	97.9	97.9	98.0
≥ 500	82.3	87.5	89.3	89.8	92.3	93.4	94.3	95.5	95.9	96.8	97.4	97.8	98.4	98.6	98.6	98.7
≥ 400	82.4	87.8	89.5	90.0	92.7	93.8	94.7	95.9	96.2	97.2	97.8	98.1	98.7	98.9	98.9	99.1
≥ 300	82.4	87.9	89.6	90.1	92.8	93.9	94.8	96.0	96.3	97.4	98.0	98.4	98.9	99.2	99.3	99.5
≥ 200	82.4	87.9	89.6	90.1	92.8	93.9	94.8	96.0	96.3	97.4	98.0	98.4	98.9	99.2	99.3	99.9
≥ 100	82.4	87.9	89.6	90.1	92.8	93.9	94.8	96.0	96.3	97.4	98.0	98.4	98.9	99.2	99.3	100.0
≥ 0	82.4	87.9	89.6	90.1	92.8	93.9	94.8	96.0	96.3	97.4	98.0	98.4	98.9	99.2	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ⅓	≥ 5/16	≥ ¼	≥ 0
NO CEILING	45.8	47.6	48.5	48.5	48.9	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1
≥ 20000	57.1	59.4	60.3	60.3	61.0	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
≥ 18000	57.5	59.7	60.7	60.7	61.4	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
≥ 16000	57.6	59.8	60.8	60.8	61.5	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 14000	59.2	61.7	62.7	62.7	63.4	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
≥ 12000	64.4	67.1	68.1	68.1	68.6	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 10000	72.7	75.5	76.4	76.4	77.3	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
≥ 9000	73.6	76.6	77.6	77.6	78.4	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 8000	76.4	79.6	80.7	80.7	81.5	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 7000	77.6	80.9	82.1	82.2	83.0	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
≥ 6000	78.6	82.0	83.2	83.3	84.1	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 5000	80.4	84.0	85.3	85.4	86.2	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 4500	80.9	84.5	85.7	85.9	86.7	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
≥ 4000	81.6	85.4	86.9	87.0	88.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 3500	81.9	85.7	87.4	87.5	88.8	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 3000	82.6	86.5	88.3	88.6	90.0	90.3	90.6	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
≥ 2500	82.9	86.8	88.9	89.2	90.7	91.2	91.4	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 2000	83.2	87.4	89.8	90.0	92.1	92.7	92.9	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 1800	83.2	87.4	89.9	90.1	92.2	92.8	93.1	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1500	83.3	87.6	90.1	90.6	92.8	93.4	93.8	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 1200	83.5	88.1	90.6	91.0	93.4	94.0	94.3	95.1	95.3	95.4	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1000	83.9	88.6	91.2	91.6	94.0	94.6	94.9	95.8	96.1	96.2	96.3	96.5	96.6	96.6	96.6	96.6
≥ 900	83.9	88.6	91.2	91.6	94.0	94.7	95.3	96.1	96.6	96.9	97.1	97.2	97.3	97.3	97.3	97.3
≥ 800	84.0	88.7	91.3	91.8	94.1	94.8	95.4	96.2	96.7	97.1	97.2	97.3	97.4	97.4	97.4	97.4
≥ 700	84.3	89.0	91.8	92.2	94.7	95.4	96.0	96.9	97.4	98.0	98.1	98.2	98.4	98.4	98.4	98.4
≥ 600	84.3	89.2	92.0	92.5	94.9	95.6	96.2	97.2	97.8	98.4	98.5	98.6	98.7	98.7	98.7	98.7
≥ 500	84.3	89.2	92.1	92.7	95.3	96.0	96.6	97.6	98.4	99.1	99.2	99.3	99.4	99.4	99.4	99.4
≥ 400	84.3	89.3	92.2	92.8	95.4	96.1	96.7	97.8	98.5	99.2	99.3	99.4	99.5	99.5	99.5	99.5
≥ 300	84.3	89.3	92.2	92.8	95.5	96.2	96.8	98.0	98.7	99.4	99.5	99.6	99.8	99.8	99.8	99.8
≥ 200	84.3	89.3	92.2	92.8	95.5	96.2	96.8	98.0	98.7	99.4	99.5	99.6	99.8	99.9	100.0	100.0
≥ 100	84.3	89.3	92.2	92.8	95.5	96.2	96.8	98.0	98.7	99.4	99.5	99.6	99.8	99.9	100.0	100.0
≥ 0	84.3	89.3	92.2	92.8	95.5	96.2	96.8	98.0	98.7	99.4	99.5	99.6	99.8	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	≥5/16	¾	≥0
NO CEILING	45.0	47.0	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
≥ 20000	56.3	58.8	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 18000	56.5	59.0	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 16000	56.9	59.4	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 14000	58.4	60.9	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5
≥ 12000	63.3	65.7	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
≥ 10000	72.6	75.6	76.4	76.4	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
≥ 9000	73.6	76.9	77.9	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 8000	76.3	79.7	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
≥ 7000	77.9	81.3	82.2	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
≥ 6000	79.6	83.3	84.2	84.3	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
≥ 5000	82.3	86.0	87.0	87.2	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 4500	82.4	86.3	87.4	87.5	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8
≥ 4000	83.6	88.3	89.5	89.6	89.9	89.9	89.9	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
≥ 3500	84.3	89.2	90.3	90.5	90.7	90.7	90.7	91.0	91.0	91.0	91.2	91.2	91.2	91.2	91.2	91.2
≥ 3000	84.9	89.9	91.0	91.2	91.5	91.6	91.6	92.0	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1
≥ 2500	85.5	91.2	92.6	92.7	93.2	93.4	93.4	93.8	93.8	93.8	93.9	93.9	93.9	93.9	93.9	93.9
≥ 2000	85.6	91.4	92.8	93.1	93.6	93.9	94.0	94.6	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1800	85.6	91.4	92.8	93.1	93.6	93.9	94.0	94.6	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1500	85.9	92.1	93.5	93.8	94.3	94.8	95.2	95.8	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0
≥ 1200	86.2	92.7	94.1	94.3	94.9	95.4	95.8	96.5	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1000	86.5	93.2	94.7	94.9	95.5	96.1	96.5	97.2	97.3	97.3	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900	86.6	93.3	95.1	95.3	96.0	96.6	97.1	97.8	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	86.6	93.3	95.1	95.3	96.0	96.6	97.1	97.8	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	86.6	93.3	95.2	95.4	96.2	96.8	97.3	98.0	98.1	98.2	98.4	98.4	98.4	98.4	98.4	98.4
≥ 600	86.6	93.3	95.2	95.4	96.3	96.9	97.4	98.4	98.5	98.7	98.8	98.8	98.8	98.8	98.8	98.8
≥ 500	86.6	93.3	95.2	95.4	96.3	97.1	97.5	98.5	98.7	99.1	99.2	99.2	99.3	99.3	99.3	99.3
≥ 400	86.6	93.3	95.2	95.4	96.3	97.1	97.5	98.5	98.7	99.2	99.3	99.4	99.5	99.5	99.5	99.5
≥ 300	86.6	93.4	95.3	95.5	96.6	97.3	97.8	98.7	98.9	99.4	99.5	99.8	99.9	99.9	99.9	99.9
≥ 200	86.6	93.4	95.3	95.5	96.6	97.3	97.8	98.7	98.9	99.4	99.5	99.9	100.0	100.0	100.0	100.0
≥ 100	86.6	93.4	95.3	95.5	96.6	97.3	97.8	98.7	98.9	99.4	99.5	99.9	100.0	100.0	100.0	100.0
≥ 0	86.6	93.4	95.3	95.5	96.6	97.3	97.8	98.7	98.9	99.4	99.5	99.9	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

849

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

FEB
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	¾	¾
NO CEILING ≥ 20000	41.9 48.4	52.9 62.8	52.9 62.8	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9	52.9 62.9
≥ 18000 ≥ 16000	48.5 48.5	62.9 63.0	62.9 63.0	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1	63.0 63.1
≥ 14000 ≥ 12000	49.2 53.1	63.7 68.2	63.7 68.2	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3	63.8 68.3
≥ 10000 ≥ 9000	61.0 61.4	77.7 78.2	78.0 78.4	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6	78.1 78.6
≥ 8000 ≥ 7000	62.9 65.0	80.2 82.4	80.4 82.7	80.6 82.8	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9	80.7 82.9
≥ 6000 ≥ 5000	65.5 67.1	83.0 85.2	83.3 85.5	83.4 85.6	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9	83.5 85.9
≥ 4500 ≥ 4000	67.6 68.8	85.9 87.6	86.2 88.7	86.3 88.8	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2	86.6 89.2
≥ 3500 ≥ 3000	69.8 70.0	88.9 89.5	90.0 90.7	90.2 90.9	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5	90.6 91.5
≥ 2500 ≥ 2000	70.2 70.8	90.2 91.0	91.4 92.3	91.6 92.7	92.5 93.9	92.5 94.0	92.5 94.0	92.5 94.1	92.5 94.2	92.5 94.2	92.5 94.2	92.5 94.2	92.5 94.2	92.5 94.2	92.5 94.2	92.5 94.2
≥ 1800 ≥ 1500	70.8 70.8	91.3 92.0	92.6 93.6	92.9 94.0	94.1 95.3	94.2 95.5	94.2 95.5	94.3 95.9	94.5 96.0	94.5 96.1	94.5 96.1	94.5 96.1	94.5 96.1	94.5 96.1	94.5 96.1	94.5 96.1
≥ 1200 ≥ 1000	70.9 71.0	92.5 93.1	94.1 94.7	94.5 95.1	95.8 96.5	96.0 96.7	96.0 96.8	96.5 97.4	96.7 97.6	96.8 97.8	96.9 98.0	96.9 98.0	96.9 98.0	96.9 98.0	96.9 98.0	96.9 98.0
≥ 900 ≥ 800	71.3 71.3	93.3 93.3	94.9 94.9	95.3 95.3	96.7 96.7	97.1 97.1	97.2 97.2	97.8 97.9	98.0 98.2	98.1 98.4	98.4 98.6	98.4 98.6	98.4 98.6	98.4 98.6	98.4 98.6	98.4 98.6
≥ 700 ≥ 600	71.5 71.5	93.5 93.5	95.2 95.2	95.5 95.5	97.1 97.1	97.4 97.5	97.5 97.6	98.4 98.5	98.7 98.8	98.8 98.9	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3
≥ 500 ≥ 400	71.5 71.5	93.8 93.9	95.4 95.5	95.8 95.9	97.4 97.6	97.9 98.1	98.0 98.2	98.8 99.1	99.2 99.4	99.3 99.5	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0	99.8 100.0
≥ 300 ≥ 200	71.5 71.5	93.9 93.9	95.5 95.5	95.9 95.9	97.6 97.6	98.1 98.1	98.2 98.2	99.1 99.1	99.4 99.4	99.5 99.5	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 ≥ 0	71.5 71.5	93.9 93.9	95.5 95.5	95.9 95.9	97.6 97.6	98.1 98.1	98.2 98.2	99.1 99.1	99.4 99.4	99.5 99.5	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 849

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MARMSTROM AFB MT/GREAT FALLS

68-77

FEB

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS UT-5

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING ≥ 20000	37.1 45.5	52.3 64.9	52.8 65.4	52.8 65.4	52.9 65.7	52.9 65.7	52.9 65.7	52.9 65.7	52.9 65.7	53.0 65.8	53.0 65.8	53.0 65.8	53.0 65.8	53.0 65.8	53.1 66.0	53.1 66.0
IV ≥ 18000 IV ≥ 16000	45.5 45.5	64.9 64.9	65.4 65.4	65.4 65.4	65.7 65.7	65.7 65.7	65.7 65.7	65.7 65.7	65.7 65.7	65.8 65.8	65.8 65.8	65.8 65.8	65.8 65.8	65.8 65.8	66.0 66.0	66.0 66.0
IV ≥ 14000 IV ≥ 12000	45.7 48.6	65.5 69.1	66.0 69.6	66.0 69.6	66.3 70.0	66.3 70.0	66.3 70.0	66.3 70.0	66.3 70.0	66.4 70.1	66.4 70.1	66.4 70.1	66.4 70.1	66.4 70.1	66.5 70.2	66.5 70.2
IV ≥ 10000 IV ≥ 9000	53.8 54.3	75.9 76.8	76.3 77.3	76.3 77.3	76.7 77.6	76.7 77.6	76.7 77.6	76.7 77.6	76.7 77.6	76.8 77.7	76.8 77.7	76.8 77.7	76.8 77.7	76.8 77.7	76.9 77.9	76.9 77.9
IV ≥ 8000 IV ≥ 7000	55.1 56.4	77.7 79.4	78.2 79.9	78.2 79.9	78.6 80.2	78.6 80.2	78.6 80.2	78.6 80.2	78.6 80.2	78.7 80.3	78.7 80.3	78.7 80.3	78.7 80.3	78.7 80.3	78.8 80.4	78.8 80.4
IV ≥ 6000 IV ≥ 5000	56.4 57.1	80.0 81.3	80.4 81.9	80.4 81.9	80.9 82.3	80.9 82.3	80.9 82.3	80.9 82.3	80.9 82.3	81.0 82.4	81.0 82.4	81.0 82.4	81.0 82.4	81.0 82.4	81.2 82.6	81.2 82.6
IV ≥ 4500 IV ≥ 4000	58.0 59.0	82.4 84.3	83.0 85.2	83.0 85.2	83.5 85.6	83.6 85.7	83.6 85.7	83.6 85.7	83.6 85.7	83.7 85.9	83.7 85.9	83.7 85.9	83.7 85.9	83.7 85.9	83.9 86.0	83.9 86.0
IV ≥ 3500 IV ≥ 3000	59.4 60.0	85.0 86.3	86.0 87.3	86.0 87.3	86.5 88.0	86.6 88.2	86.6 88.2	86.6 88.2	86.6 88.2	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.7 88.3	86.8 88.5	86.8 88.5
IV ≥ 2500 IV ≥ 2000	60.2 60.5	86.7 87.5	87.8 88.8	87.8 88.8	88.5 89.5	88.7 90.1	88.7 90.2	88.7 90.5	88.7 90.5	88.8 90.6	88.8 90.6	88.8 90.6	88.8 90.6	88.8 90.6	88.9 90.7	88.9 90.7
IV ≥ 1800 IV ≥ 1500	60.7 61.1	87.6 88.6	89.0 90.5	89.0 90.5	89.8 91.3	90.3 92.1	90.5 92.2	90.7 92.6	90.7 92.6	90.8 92.8	90.8 92.8	90.8 92.8	90.8 92.8	90.8 92.8	90.9 92.9	90.9 92.9
IV ≥ 1200 IV ≥ 1000	61.2 61.5	89.0 89.6	91.0 91.6	91.0 91.8	92.2 92.9	93.2 94.1	93.8 95.1	94.1 95.5	94.1 95.5	94.5 95.9	94.5 96.1	94.5 96.1	94.5 96.1	94.5 96.1	94.6 96.2	94.6 96.2
IV ≥ 900 IV ≥ 800	61.6 61.7	90.0 90.5	92.1 92.6	92.2 92.8	93.4 94.2	94.6 95.4	95.5 96.5	96.0 97.1	96.0 97.1	96.3 97.4	96.6 97.6	96.6 97.6	96.6 97.6	96.6 97.6	96.7 97.8	96.7 97.8
IV ≥ 700 IV ≥ 600	61.8 61.8	90.7 90.7	92.8 92.8	93.1 93.1	94.5 94.6	96.0 96.1	97.1 97.2	97.6 98.0	97.6 98.0	98.0 98.4	98.2 98.6	98.2 98.6	98.4 98.7	98.4 98.7	98.5 98.8	98.5 98.8
IV ≥ 500 IV ≥ 400	61.8 61.8	90.9 90.9	93.2 93.2	93.4 93.4	94.9 94.9	96.5 96.5	97.5 97.5	98.4 98.5	98.4 98.5	98.7 98.8	98.9 99.1	98.9 99.1	99.1 99.1	99.1 99.2	99.2 99.3	99.2 99.3
IV ≥ 300 IV ≥ 200	61.8 61.8	91.0 91.0	93.3 93.3	93.5 93.5	95.2 95.2	96.7 96.7	97.8 97.8	98.6 98.6	98.7 98.7	99.1 99.1	99.4 99.4	99.4 99.4	99.5 99.5	99.5 99.5	99.6 99.6	99.6 99.6
IV ≥ 100 IV ≥ 0	61.8 61.8	91.0 91.0	93.3 93.3	93.5 93.5	95.2 95.2	96.7 96.7	97.8 97.8	98.7 98.7	98.8 98.8	99.2 99.2	99.5 99.5	99.5 99.5	99.6 99.6	99.6 99.6	99.8 99.8	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 849

USAF ETAC FORM 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING	40.7	49.5	49.9	49.9	50.1	50.2	50.2	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.4	50.4
≥ 20000	49.1	60.1	60.5	60.6	61.0	61.1	61.1	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.3	61.4
≥ 18000	49.2	60.3	60.7	60.7	61.1	61.2	61.2	61.3	61.3	61.3	61.4	61.4	61.4	61.4	61.5	61.5
≥ 16000	49.3	60.4	60.8	60.8	61.2	61.3	61.3	61.4	61.4	61.4	61.4	61.4	61.4	61.5	61.5	61.6
≥ 14000	50.3	61.5	61.9	62.0	62.4	62.4	62.5	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.7	62.8
≥ 12000	54.6	66.1	66.5	66.6	67.0	67.0	67.1	67.2	67.2	67.2	67.2	67.2	67.2	67.3	67.3	67.4
≥ 10000	61.7	74.4	74.7	74.9	75.4	75.5	75.5	75.6	75.6	75.7	75.7	75.7	75.7	75.7	75.8	75.8
≥ 9000	62.4	75.3	75.9	75.9	76.4	76.5	76.5	76.6	76.6	76.7	76.7	76.7	76.7	76.7	76.8	76.8
≥ 8000	64.4	77.5	78.2	78.2	78.7	78.8	78.8	78.9	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.1
≥ 7000	65.8	79.2	79.8	79.9	80.4	80.5	80.5	80.6	80.6	80.7	80.7	80.7	80.7	80.7	80.7	80.8
≥ 6000	66.6	80.3	80.9	81.0	81.6	81.6	81.7	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.9	81.9
≥ 5000	68.1	82.1	82.8	83.0	83.5	83.6	83.6	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.9	83.9
≥ 4500	68.5	82.7	83.4	83.5	84.1	84.2	84.2	84.3	84.3	84.4	84.4	84.4	84.4	84.4	84.5	84.5
≥ 4000	69.7	84.4	85.4	85.5	86.2	86.3	86.3	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.7	86.7
≥ 3500	70.3	85.5	86.5	86.6	87.4	87.5	87.5	87.7	87.7	87.8	87.8	87.8	87.8	87.8	87.9	87.9
≥ 3000	70.7	86.3	87.4	87.5	88.4	88.6	88.7	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.1	89.1
≥ 2500	71.1	86.9	88.2	88.4	89.4	89.7	89.8	90.0	90.1	90.1	90.2	90.2	90.2	90.2	90.3	90.3
≥ 2000	71.6	87.7	89.2	89.5	90.9	91.2	91.5	91.9	91.9	92.0	92.0	92.1	92.1	92.2	92.2	92.2
≥ 1800	71.6	87.8	89.5	89.7	91.2	91.5	91.8	92.2	92.3	92.4	92.4	92.4	92.5	92.5	92.5	92.6
≥ 1500	72.0	88.6	90.5	90.8	92.4	93.0	93.3	93.8	93.9	94.1	94.1	94.1	94.2	94.2	94.2	94.3
≥ 1200	72.2	89.3	91.2	91.5	93.2	93.9	94.3	94.9	95.1	95.2	95.3	95.3	95.4	95.4	95.4	95.5
≥ 1000	72.5	89.8	91.8	92.1	93.9	94.6	95.2	95.8	96.0	96.2	96.3	96.4	96.5	96.5	96.5	96.6
≥ 900	72.5	89.9	92.0	92.3	94.1	94.8	95.4	96.1	96.3	96.5	96.7	96.7	96.8	96.8	96.9	96.9
≥ 800	72.6	90.0	92.1	92.4	94.2	94.9	95.6	96.3	96.5	96.8	96.9	97.0	97.0	97.1	97.1	97.1
≥ 700	72.7	90.2	92.2	92.6	94.4	95.2	95.9	96.7	96.9	97.2	97.4	97.5	97.6	97.6	97.6	97.7
≥ 600	72.7	90.2	92.3	92.6	94.6	95.4	96.1	97.0	97.3	97.6	97.8	97.9	98.0	98.1	98.1	98.1
≥ 500	72.7	90.3	92.4	92.8	94.8	95.6	96.4	97.3	97.6	98.1	98.3	98.4	98.5	98.6	98.6	98.7
≥ 400	72.7	90.4	92.5	92.9	94.9	95.8	96.5	97.5	97.9	98.3	98.6	98.6	98.8	98.9	99.0	99.1
≥ 300	72.7	90.5	92.6	93.0	95.1	95.9	96.7	97.7	98.1	98.6	98.9	99.0	99.2	99.2	99.3	99.5
≥ 200	72.7	90.5	92.7	93.0	95.1	96.0	96.7	97.7	98.1	98.7	98.9	99.1	99.3	99.4	99.5	99.8
≥ 100	72.7	90.5	92.7	93.0	95.1	96.0	96.7	97.7	98.1	98.7	99.0	99.1	99.3	99.4	99.5	99.9
≥ 0	72.7	90.5	92.7	93.0	95.1	96.0	96.7	97.7	98.1	98.7	99.0	99.1	99.3	99.4	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS

6792

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTPOM AFB MT/GREAT FALLS

68-77

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	¾	≥0
NO CEILING	34.2	49.9	49.9	49.9	50.0	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.2	50.2	50.2	50.2
≥ 20000	41.3	60.5	60.5	60.5	60.6	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.9	60.9	60.9	60.9
≥ 18000	41.3	60.5	60.5	60.5	60.6	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.9	60.9	60.9	60.9
≥ 16000	41.3	60.5	60.5	60.5	60.6	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.9	60.9	60.9	60.9
≥ 14000	42.3	61.5	61.5	61.5	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.8	61.8	61.8	61.8
≥ 12000	45.1	64.9	65.1	65.1	65.2	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.4	65.4	65.4	65.4
≥ 10000	50.0	71.1	71.2	71.2	71.3	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.5	71.5	71.5	71.5
≥ 9000	50.6	71.8	71.9	71.9	72.0	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.3	72.3	72.3	72.3
≥ 8000	52.5	74.1	74.2	74.2	74.3	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.5	74.5	74.5	74.5
≥ 7000	53.2	74.9	75.1	75.1	75.2	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.4	75.4	75.4	75.4
≥ 6000	54.1	76.1	76.2	76.2	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.6	76.6	76.6	76.6
≥ 5000	55.3	78.0	78.1	78.1	78.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.4	78.4	78.4	78.4
≥ 4500	55.8	79.1	79.2	79.2	79.4	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.6	79.6	79.6	79.6
≥ 4000	58.4	82.4	82.6	82.6	82.7	82.9	82.9	82.9	83.0	83.0	83.0	83.0	83.1	83.1	83.1	83.1
≥ 3500	59.5	84.5	84.8	84.8	85.1	85.3	85.3	85.3	85.4	85.4	85.4	85.4	85.5	85.5	85.5	85.5
≥ 3000	60.2	85.9	86.5	86.5	86.9	87.2	87.2	87.2	87.3	87.3	87.3	87.3	87.4	87.4	87.4	87.4
≥ 2500	60.4	86.8	87.5	87.7	88.3	88.6	88.8	88.8	88.9	88.9	88.9	88.9	89.0	89.0	89.0	89.0
≥ 2000	60.4	87.3	88.3	88.7	89.6	90.1	90.5	90.5	90.6	90.9	91.0	91.0	91.1	91.1	91.1	91.1
≥ 1800	60.5	87.6	88.6	89.0	90.1	90.8	91.2	91.2	91.3	91.5	91.6	91.6	91.7	91.7	91.7	91.7
≥ 1500	60.8	88.4	89.5	89.9	91.1	91.8	92.4	92.4	92.5	92.7	92.8	92.8	92.9	92.9	92.9	92.9
≥ 1200	60.8	88.4	89.6	90.1	91.3	92.0	92.8	92.9	93.2	93.5	93.7	93.7	93.8	93.8	93.8	93.8
≥ 1000	60.8	88.5	89.8	90.3	91.6	92.6	94.0	94.3	94.7	95.1	95.2	95.2	95.3	95.3	95.3	95.3
≥ 900	60.8	88.5	89.8	90.3	91.6	92.6	94.2	94.5	94.9	95.4	95.5	95.5	95.6	95.6	95.6	95.6
≥ 800	60.8	88.9	90.2	90.9	92.2	93.1	94.7	95.2	95.8	96.2	96.3	96.3	96.5	96.6	96.6	96.6
≥ 700	60.8	88.9	90.2	90.9	92.3	93.2	94.8	95.3	95.9	96.3	96.6	96.6	96.7	96.8	96.8	96.8
≥ 600	60.9	89.2	90.5	91.2	92.7	93.7	95.4	96.1	96.8	97.4	97.6	97.6	97.7	97.8	97.8	97.8
≥ 500	60.9	89.4	90.6	91.3	92.8	93.9	95.6	96.5	97.1	97.7	98.0	98.0	98.1	98.2	98.2	98.2
≥ 400	60.9	89.4	90.6	91.3	92.8	93.9	95.7	96.6	97.2	97.8	98.1	98.1	98.2	98.3	98.3	98.3
≥ 300	60.9	89.4	90.6	91.4	92.9	94.0	95.8	96.7	97.3	98.0	98.2	98.2	98.3	98.4	98.4	98.5
≥ 200	60.9	89.4	90.6	91.5	93.2	94.5	96.3	97.2	97.8	98.5	98.7	98.7	98.8	99.0	99.2	99.6
≥ 100	60.9	89.4	90.6	91.5	93.2	94.5	96.6	97.4	98.2	98.8	99.1	99.1	99.2	99.5	99.7	100.0
≥ 0	60.9	89.4	90.6	91.5	93.2	94.5	96.6	97.4	98.2	98.8	99.1	99.1	99.2	99.5	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0300-0500
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING	35.6	49.2	49.4	49.4	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.7	49.8	50.0
≥ 20000	42.4	59.1	59.2	59.2	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.7	59.9
≥ 18000	42.4	59.2	59.4	59.4	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.8	60.0
≥ 15000	42.4	59.6	59.7	59.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.1	60.3
≥ 14000	43.0	60.2	60.3	60.3	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.8	61.0
≥ 12000	45.8	63.2	63.3	63.3	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.8	64.0
≥ 10000	51.1	69.8	69.9	70.0	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.4	70.6
≥ 9000	51.5	70.5	70.6	70.8	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.2	71.4
≥ 8000	52.6	72.3	72.6	72.7	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.1	73.3
≥ 7000	53.1	73.4	73.5	73.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.1	74.3
≥ 6000	54.7	75.4	75.5	75.6	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	76.0	76.2
≥ 5000	56.0	77.0	77.2	77.3	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.7	78.0
≥ 4500	56.5	78.2	78.5	78.6	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	79.0	79.2
≥ 4000	58.5	81.5	81.9	82.0	82.5	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.9	83.1
≥ 3500	59.4	82.9	83.3	83.5	84.1	84.4	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.6	84.8
≥ 3000	60.2	84.5	85.1	85.3	85.8	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.6	86.8
≥ 2500	60.4	85.1	85.7	86.0	86.6	87.0	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.3	87.6
≥ 2000	60.8	86.9	87.8	88.2	88.7	89.1	89.2	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.8	90.1
≥ 1800	61.0	87.3	88.4	88.7	89.4	89.8	89.9	90.3	90.3	90.3	90.3	90.3	90.3	90.4	90.5	90.8
≥ 1500	61.1	88.0	89.0	89.5	90.6	91.1	91.2	91.7	91.8	91.8	91.8	91.8	91.8	91.9	92.0	92.3
≥ 1200	61.1	88.1	89.1	89.7	91.2	91.6	91.8	92.7	92.9	93.0	93.0	93.0	93.0	93.1	93.2	93.4
≥ 1000	61.5	88.7	89.8	90.3	92.0	92.5	92.8	93.8	94.0	94.2	94.3	94.3	94.3	94.4	94.5	94.7
≥ 900	61.5	88.7	89.8	90.3	92.2	92.7	93.1	94.1	94.3	94.5	94.8	94.9	95.1	95.2	95.4	95.4
≥ 800	61.5	88.7	89.8	90.3	92.3	92.8	93.2	94.5	94.8	95.1	95.4	95.5	95.6	95.7	95.9	95.9
≥ 700	61.5	88.9	90.0	90.8	92.7	93.3	93.8	95.1	95.4	95.6	95.9	96.0	96.1	96.2	96.5	96.5
≥ 600	61.5	89.4	90.5	91.4	93.3	94.0	94.4	95.8	96.1	96.7	97.0	97.1	97.2	97.3	97.5	97.5
≥ 500	61.6	89.7	90.9	91.7	93.7	94.3	94.8	96.2	96.6	97.1	97.4	97.5	97.6	97.7	98.0	98.0
≥ 400	61.6	89.7	90.9	91.8	93.9	94.6	95.2	96.6	96.9	97.4	98.0	98.1	98.2	98.3	98.7	98.9
≥ 300	61.6	89.8	91.0	91.9	94.0	94.8	95.4	97.0	97.3	97.8	98.4	98.5	98.6	98.7	99.1	99.4
≥ 200	61.6	89.8	91.0	91.9	94.1	94.9	95.5	97.1	97.4	98.0	98.5	98.6	98.7	98.8	99.2	99.6
≥ 100	61.6	89.8	91.0	91.9	94.1	94.9	95.5	97.3	97.6	98.3	98.9	99.0	99.1	99.2	99.7	100.0
≥ 0	61.6	89.8	91.0	91.9	94.1	94.9	95.5	97.3	97.6	98.3	98.9	99.0	99.1	99.2	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS T-5

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	46.3 54.6	49.0 58.1	49.4 58.4	49.4 58.4	49.5 58.7	49.6 58.8	49.7 58.9	49.7 58.9	49.7 58.9	49.7 58.9	49.8 59.0	49.8 59.0	49.9 59.1	50.0 59.2	50.0 59.2	50.0 59.2
≥ 18000 ≥ 16000	54.9 55.7	58.4 59.2	58.7 59.6	58.7 59.6	59.0 59.9	59.1 60.0	59.2 60.1	59.2 60.1	59.2 60.1	59.2 60.1	59.4 60.2	59.4 60.2	59.5 60.3	59.6 60.4	59.6 60.4	59.6 60.4
≥ 14000 ≥ 12000	56.5 59.0	60.0 62.7	60.2 63.0	60.2 63.0	60.3 63.2	60.6 63.4	60.8 63.5	60.9 63.5	60.9 63.5	60.9 63.5	61.0 63.7	61.0 63.7	61.1 63.8	61.2 63.9	61.2 63.9	61.2 63.9
≥ 10000 ≥ 9000	66.1 67.4	69.9 71.3	70.2 71.6	70.2 71.6	70.5 71.9	70.6 72.0	70.9 72.3	70.9 72.3	70.9 72.3	70.9 72.3	71.0 72.4	71.0 72.4	71.1 72.5	71.2 72.6	71.3 72.7	71.3 72.7
≥ 8000 ≥ 7000	70.6 72.2	74.5 76.1	74.8 76.5	74.8 76.5	75.2 76.8	75.3 76.9	75.5 77.1	75.5 77.1	75.5 77.1	75.5 77.1	75.6 77.2	75.6 77.2	75.7 77.3	75.8 77.4	75.9 77.5	75.9 77.5
≥ 6000 ≥ 5000	73.3 74.7	77.5 79.1	77.8 79.5	77.8 79.5	78.2 79.8	78.3 79.9	78.5 80.1	78.5 80.1	78.5 80.1	78.5 80.2	78.6 80.3	78.6 80.3	78.7 80.4	78.8 80.5	78.9 80.6	78.9 80.6
≥ 4500 ≥ 4000	75.4 76.9	80.3 82.2	80.9 82.7	80.9 82.7	81.2 83.0	81.3 83.1	81.5 83.9	81.5 83.9	81.5 83.9	81.6 84.0	81.7 84.1	81.7 84.1	81.8 84.2	81.9 84.3	82.0 84.4	82.0 84.4
≥ 3500 ≥ 3000	77.6 78.0	82.9 83.4	83.7 84.3	83.8 84.5	84.3 85.1	84.5 85.3	85.3 86.0	85.3 86.0	85.3 86.0	85.4 86.1	85.5 86.2	85.5 86.2	85.6 86.3	85.7 86.5	85.8 86.6	85.8 86.6
≥ 2500 ≥ 2000	78.3 78.6	84.5 85.7	85.4 86.7	85.6 87.0	86.1 87.6	86.5 88.1	87.2 88.9	87.2 89.0	87.2 89.0	87.3 89.1	87.4 89.2	87.4 89.2	87.5 89.4	87.6 89.5	87.7 89.6	87.7 89.6
≥ 1800 ≥ 1500	78.8 78.8	86.3 86.3	87.3 87.3	87.6 87.6	88.3 88.4	88.7 88.8	89.6 89.8	89.7 89.9	89.7 89.9	89.8 90.2	89.9 90.3	89.9 90.3	90.0 90.4	90.1 90.5	90.2 90.6	90.2 90.6
≥ 1200 ≥ 1000	79.1 79.2	86.8 87.2	87.8 88.3	88.2 88.7	88.9 89.6	89.4 90.1	90.4 91.4	90.8 91.7	91.0 91.9	91.3 92.4	91.4 92.5	91.4 92.5	91.5 92.9	91.6 93.0	91.7 93.1	91.7 93.1
≥ 900 ≥ 800	79.4 79.4	87.3 87.4	88.4 88.5	88.8 88.9	89.7 89.8	90.2 90.3	91.6 91.8	92.0 92.3	92.4 92.7	92.8 93.3	93.0 93.7	93.0 93.7	93.5 94.3	93.7 94.4	93.9 94.7	93.9 94.7
≥ 700 ≥ 600	79.5 79.6	87.5 87.7	88.6 88.9	89.4 89.8	90.3 90.9	90.9 91.6	92.4 93.1	92.9 93.7	93.3 94.1	94.0 94.7	94.4 95.2	94.4 95.2	95.1 96.0	95.2 96.1	95.5 96.5	95.5 96.7
≥ 500 ≥ 400	79.6 79.7	87.8 88.0	89.0 89.1	89.9 90.0	91.1 91.2	91.8 91.9	93.4 93.8	94.0 94.3	94.4 94.7	95.1 95.6	95.5 96.0	95.5 96.1	96.6 97.3	96.7 97.4	97.1 97.8	97.3 98.2
≥ 300 ≥ 200	79.8 79.8	88.1 88.2	89.2 89.4	90.1 90.2	91.5 91.6	92.3 92.4	94.1 94.2	94.7 94.8	95.2 95.3	96.0 96.3	96.5 96.8	96.7 97.0	97.8 98.3	98.0 98.4	98.4 98.9	98.8 99.5
≥ 100 ≥ 0	79.8 79.8	88.2 88.2	89.4 89.4	90.2 90.2	91.6 91.6	92.4 92.4	94.2 94.2	95.1 95.1	95.6 95.7	96.8 96.9	97.2 97.3	97.4 97.5	98.7 98.8	98.8 98.9	99.4 99.5	99.9 100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	50.6	51.8	52.0	52.3	52.4	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 20000	61.1	62.5	62.7	62.9	63.3	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
≥ 18000	61.5	62.9	63.1	63.3	63.8	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
≥ 16000	61.6	63.0	63.2	63.4	63.9	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
≥ 14000	63.0	64.4	64.6	64.8	65.3	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
≥ 12000	66.1	67.5	67.7	68.0	68.4	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 10000	72.6	74.2	74.4	74.6	75.1	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4
≥ 9000	73.3	74.9	75.2	75.4	75.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 8000	75.3	76.9	77.1	77.3	77.8	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
≥ 7000	76.0	77.6	77.8	78.1	78.6	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
≥ 6000	77.2	78.8	79.0	79.2	79.8	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
≥ 5000	78.7	80.4	80.6	80.9	81.4	81.7	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
≥ 4500	79.0	81.0	81.2	81.4	82.0	82.4	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
≥ 4000	80.6	83.0	83.3	83.7	84.3	84.6	84.7	84.7	84.7	84.7	84.7	84.8	84.8	84.8	84.8	84.8
≥ 3500	80.8	83.1	83.4	83.9	84.6	84.9	85.1	85.2	85.2	85.2	85.3	85.3	85.4	85.4	85.4	85.4
≥ 3000	81.6	84.1	84.5	84.9	85.7	86.0	86.1	86.5	86.5	86.5	86.6	86.6	86.8	86.8	86.8	86.8
≥ 2500	82.4	85.5	85.9	86.6	87.3	87.6	88.0	88.3	88.3	88.3	88.4	88.4	88.6	88.6	88.6	88.6
≥ 2000	82.9	86.7	87.1	87.7	88.6	88.9	89.2	89.7	89.7	89.7	89.8	89.8	90.0	90.0	90.0	90.0
≥ 1800	82.9	87.0	87.4	88.1	88.9	89.2	89.6	90.0	90.2	90.3	90.4	90.4	90.6	90.6	90.6	90.6
≥ 1500	83.2	87.4	88.1	88.8	89.7	90.0	90.5	91.1	91.4	91.5	91.6	91.6	91.8	91.8	91.8	91.8
≥ 1200	82.8	88.5	89.2	90.0	90.9	91.3	91.9	92.7	93.3	93.5	93.7	93.7	93.9	94.0	94.0	94.0
≥ 1000	84.0	88.8	89.6	90.4	91.5	92.0	92.8	93.5	94.3	94.6	94.8	94.9	95.3	95.4	95.4	95.4
≥ 900	84.0	88.8	89.8	90.6	91.8	92.4	93.1	93.9	94.6	95.1	95.5	95.6	95.9	96.0	96.0	96.0
≥ 800	84.1	89.0	90.0	90.9	92.0	92.7	93.4	94.2	94.9	95.6	96.1	96.2	96.6	96.7	96.7	96.7
≥ 700	84.1	89.0	90.0	91.0	92.3	92.9	93.9	94.7	95.7	96.3	96.9	97.0	97.3	97.4	97.4	97.4
≥ 600	84.1	89.0	90.0	91.0	92.3	92.9	94.0	94.9	95.9	96.6	97.2	97.4	97.7	97.8	98.0	98.2
≥ 500	84.1	89.0	90.0	91.0	92.4	93.0	94.1	95.3	96.2	97.0	97.7	98.0	98.3	98.4	98.5	98.7
≥ 400	84.1	89.0	90.0	91.0	92.4	93.0	94.1	95.4	96.5	97.2	98.1	98.3	98.6	98.7	98.8	99.0
≥ 300	84.1	89.1	90.1	91.1	92.6	93.2	94.3	95.6	96.7	97.5	98.4	98.6	99.0	99.2	99.4	99.6
≥ 200	84.1	89.1	90.1	91.1	92.6	93.2	94.4	95.7	96.8	97.6	98.5	98.7	99.1	99.4	99.7	99.9
≥ 100	84.1	89.1	90.1	91.1	92.6	93.2	94.4	95.8	96.9	97.7	98.6	98.8	99.2	99.5	99.8	100.0
≥ 0	84.1	89.1	90.1	91.1	92.6	93.2	94.4	95.8	96.9	97.7	98.6	98.8	99.2	99.5	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
W. A. TAC
1-2-77 OTHER SERVICE/MAC

CEILING VERSUS VISIBILITY

112 MALMSTRUM AFB MT/GREAT FALLS 68-77 YEARS MAR MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS CST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1	≥ 0
NO CEILING ≥ 20000	46.0 57.1	47.5 59.0	47.6 59.4	48.1 59.8	48.1 59.8	48.1 59.8	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9	48.1 59.9
≥ 18000 ≥ 16000	58.0 58.4	59.9 60.3	60.2 60.6	60.6 61.1	60.6 61.1	60.6 61.1	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2	60.8 61.2
≥ 14000 ≥ 12000	59.6 64.3	61.5 66.2	61.8 66.6	62.3 67.0	62.3 67.0	62.3 67.0	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1	62.4 67.1
≥ 10000 ≥ 9000	70.0 71.1	72.0 73.1	72.4 73.4	72.8 73.9	72.8 73.9	72.8 73.9	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0	72.9 74.0
≥ 8000 ≥ 7000	72.7 73.1	74.8 75.3	75.2 75.6	75.6 76.0	75.6 76.0	75.6 76.0	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1	75.7 76.1
≥ 6000 ≥ 5000	74.4 78.4	76.6 80.6	76.9 81.0	77.3 81.4	77.3 81.4	77.3 81.5	77.4 81.6	77.4 81.7	77.4 81.7	77.4 81.7	77.4 81.7	77.4 81.7	77.4 81.7	77.4 81.7	77.4 81.7	77.4 81.7
≥ 4500 ≥ 4000	79.6 81.3	81.8 84.0	82.2 84.6	82.6 85.2	82.6 85.4	82.7 85.6	82.8 85.7	82.9 85.8	82.9 85.8	82.9 85.9	82.9 85.9	82.9 85.9	82.9 85.9	82.9 85.9	82.9 85.9	82.9 85.9
≥ 3500 ≥ 3000	81.5 81.9	84.3 85.2	84.9 85.9	85.5 86.5	85.7 86.7	85.9 87.0	86.1 87.2	86.2 87.3	86.2 87.3	86.3 87.4	86.3 87.4	86.3 87.4	86.3 87.4	86.3 87.4	86.3 87.4	86.3 87.4
≥ 2500 ≥ 2000	82.8 83.5	86.2 87.6	87.2 88.8	87.7 89.4	88.0 89.6	88.3 89.9	88.5 90.1	88.6 90.2	88.6 90.2	88.7 90.3	88.7 90.3	88.7 90.3	88.7 90.3	88.7 90.3	88.7 90.3	88.7 90.3
≥ 1800 ≥ 1500	84.1 84.8	88.3 89.2	89.7 90.8	90.2 91.3	90.4 91.8	90.8 92.2	91.0 92.6	91.1 92.8	91.1 92.8	91.2 92.9	91.2 92.9	91.2 92.9	91.2 92.9	91.2 92.9	91.2 92.9	91.2 92.9
≥ 1200 ≥ 1000	85.1 85.3	90.0 91.0	91.5 92.6	92.0 93.1	92.8 94.0	93.1 94.3	93.5 94.7	93.8 94.9	93.9 95.2	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9	94.3 95.9
≥ 900 ≥ 800	85.3 85.5	91.0 91.3	92.6 92.9	93.2 93.5	94.1 94.5	94.4 94.8	94.9 95.4	95.4 96.0	95.7 96.3	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2	97.0 97.2
≥ 700 ≥ 600	85.5 85.5	91.3 91.3	92.9 92.9	93.5 93.5	94.5 94.5	94.8 94.8	95.4 95.4	96.0 96.0	96.3 96.3	97.2 97.4	97.6 98.0	97.8 98.4	98.2 98.9	98.2 98.9	98.2 98.9	98.2 98.9
≥ 500 ≥ 400	85.5 85.5	91.3 91.3	92.9 92.9	93.5 93.5	94.5 94.5	94.8 94.8	95.5 95.5	96.1 96.1	96.5 96.5	97.5 97.5	98.1 98.1	98.5 98.5	99.1 99.1	99.1 99.1	99.1 99.1	99.1 99.1
≥ 300 ≥ 200	85.5 85.6	91.3 91.4	92.9 93.0	93.5 93.7	94.5 94.6	94.8 94.9	95.5 95.6	96.1 96.2	96.5 96.6	97.6 97.7	98.2 98.4	98.6 98.8	99.2 99.5	99.2 99.5	99.4 99.8	99.4 99.8
≥ 100 ≥ 0	85.6 85.6	91.4 91.4	93.0 93.0	93.7 93.7	94.6 94.6	94.9 94.9	95.6 95.6	96.2 96.2	96.6 96.6	97.7 97.7	98.5 98.5	98.9 98.9	99.6 99.6	99.7 99.7	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	41.0	41.6	41.8	41.8	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
≥ 20000	53.5	54.6	55.1	55.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
≥ 18000	53.8	54.8	55.3	55.4	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
≥ 16000	53.8	54.8	55.3	55.4	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
≥ 14000	55.1	56.1	56.6	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
≥ 12000	61.0	62.0	62.5	62.6	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9
≥ 10000	68.3	69.7	70.1	70.2	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
≥ 9000	68.6	70.1	70.5	70.6	71.0	71.0	71.0	71.0	71.0	71.1	71.1	71.1	71.1	71.1	71.1	71.1
≥ 8000	70.9	72.6	73.0	73.1	73.4	73.4	73.4	73.4	73.4	73.5	73.5	73.5	73.5	73.5	73.5	73.5
≥ 7000	71.2	72.9	73.3	73.4	73.8	73.8	73.8	73.8	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9
≥ 6000	73.0	74.7	75.2	75.3	75.6	75.6	75.6	75.6	75.6	75.7	75.7	75.7	75.7	75.7	75.7	75.7
≥ 5000	77.5	79.2	79.7	79.8	80.1	80.2	80.2	80.2	80.2	80.3	80.3	80.3	80.3	80.3	80.3	80.3
≥ 4500	79.2	81.0	81.5	81.6	82.0	82.2	82.2	82.2	82.2	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 4000	82.4	84.3	84.9	85.2	85.8	85.9	85.9	86.0	86.1	86.2	86.2	86.2	86.2	86.2	86.2	86.2
≥ 3500	83.4	85.5	86.2	86.5	87.1	87.2	87.2	87.3	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 3000	83.9	86.2	87.1	87.4	88.1	88.2	88.2	88.3	88.4	88.5	88.5	88.5	88.5	88.5	88.5	88.5
≥ 2500	84.8	87.7	88.6	88.9	89.6	89.7	89.7	89.8	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 2000	85.6	89.0	90.0	90.3	91.0	91.1	91.1	91.2	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 1800	85.9	89.5	90.4	90.9	91.5	91.7	91.8	91.9	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	86.3	89.9	91.1	91.7	92.4	92.6	92.8	93.0	93.3	93.4	93.4	93.5	93.5	93.5	93.5	93.5
≥ 1200	86.7	91.1	92.3	92.9	93.9	94.1	94.3	94.5	94.9	95.2	95.2	95.3	95.3	95.3	95.3	95.3
≥ 1000	86.7	91.4	92.7	93.3	94.4	94.6	94.9	95.5	95.9	97.0	97.0	97.3	97.3	97.3	97.3	97.3
≥ 900	86.7	91.4	92.7	93.3	94.4	94.6	94.9	95.5	95.9	97.0	97.0	97.3	97.3	97.3	97.3	97.3
≥ 800	86.7	91.5	92.8	93.4	94.6	94.8	95.4	96.0	96.6	98.0	98.0	98.3	98.3	98.3	98.3	98.3
≥ 700	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.1	96.8	98.2	98.3	98.6	98.6	98.6	98.6	98.6
≥ 600	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.1	96.9	98.4	98.6	99.0	99.2	99.2	99.2	99.2
≥ 500	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.1	96.9	98.4	98.6	99.0	99.2	99.2	99.2	99.2
≥ 400	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.1	96.9	98.4	98.6	99.0	99.2	99.2	99.2	99.2
≥ 300	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.1	96.9	98.4	98.6	99.0	99.2	99.2	99.2	99.2
≥ 200	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.2	97.0	98.7	98.9	99.4	99.6	99.6	99.6	99.6
≥ 100	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.2	97.0	98.7	98.9	99.4	99.7	99.7	99.7	99.7
≥ 0	86.8	91.6	92.9	93.5	94.7	94.9	95.5	96.2	97.0	98.7	98.9	99.4	99.7	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAJ
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	≥5/16	¾	≥0
NO CEILING	35.9	43.7	43.9	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
≥ 20000	44.3	53.2	53.5	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
≥ 18000	44.4	53.4	53.7	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
≥ 16000	44.7	53.8	54.0	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
≥ 14000	46.1	55.3	55.5	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8
≥ 12000	50.9	60.4	60.6	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 10000	58.9	69.4	69.6	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
≥ 9000	59.9	70.8	71.0	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 8000	62.0	73.3	73.5	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
≥ 7000	63.3	74.7	74.9	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 6000	64.5	76.0	76.2	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
≥ 5000	67.8	79.9	80.2	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
≥ 4500	69.5	81.7	82.0	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
≥ 4000	71.8	84.6	85.2	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6
≥ 3500	72.8	85.7	86.3	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
≥ 3000	73.7	86.9	87.8	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
≥ 2500	74.2	88.0	89.1	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
≥ 2000	75.4	89.8	91.3	91.6	91.8	91.8	92.4	92.4	92.5	92.5	92.5	92.6	92.6	92.6	92.6	92.6
≥ 1800	75.6	90.1	91.8	92.2	92.4	92.4	92.9	93.0	93.1	93.2	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1500	75.7	90.5	92.3	92.7	93.0	93.2	94.0	94.1	94.3	94.4	94.5	94.5	94.5	94.5	94.5	94.5
≥ 1200	75.9	90.9	92.6	93.0	93.3	93.5	94.3	94.6	94.9	95.1	95.2	95.2	95.2	95.2	95.2	95.2
≥ 1000	76.0	91.6	93.4	93.9	94.3	94.6	95.6	95.9	96.2	96.2	97.0	97.1	97.1	97.2	97.2	97.2
≥ 900	76.0	91.8	93.7	94.1	94.5	94.8	95.9	96.2	96.6	97.3	97.4	97.4	97.4	97.5	97.5	97.5
≥ 800	76.0	92.2	94.1	94.5	94.9	95.3	96.3	96.7	97.0	97.7	97.8	97.8	98.0	98.0	98.0	98.0
≥ 700	76.0	92.2	94.2	94.6	95.2	95.5	96.7	97.0	97.3	98.1	98.2	98.4	98.9	98.9	98.9	98.9
≥ 600	76.0	92.2	94.2	94.6	95.2	95.5	96.7	97.0	97.3	98.1	98.4	98.6	99.2	99.2	99.2	99.2
≥ 500	76.0	92.2	94.2	94.6	95.2	95.5	96.7	97.0	97.3	98.1	98.4	98.6	99.4	99.4	99.4	99.4
≥ 400	76.0	92.2	94.2	94.6	95.2	95.5	96.7	97.0	97.3	98.1	98.4	98.6	99.4	99.4	99.4	99.4
≥ 300	76.0	92.2	94.2	94.6	95.2	95.5	96.7	97.0	97.3	98.1	98.5	98.7	99.5	99.5	99.5	99.7
≥ 200	76.0	92.2	94.2	94.6	95.2	95.5	96.9	97.2	97.5	98.3	98.7	98.9	99.7	99.7	99.7	100.0
≥ 100	76.0	92.2	94.2	94.6	95.2	95.5	96.9	97.2	97.5	98.3	98.7	98.9	99.7	99.7	99.7	100.0
≥ 0	76.0	92.2	94.2	94.6	95.2	95.5	96.9	97.2	97.5	98.3	98.7	98.9	99.7	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

STATION NAME

68-77

YEARS

MAR

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING ≥ 20000	35.1 42.5	51.0 61.4	51.4 61.8	51.5 61.9	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2	51.7 62.2
≥ 18000 ≥ 16000	42.6 42.6	61.5 61.5	61.9 61.9	62.0 62.0	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3	62.3 62.3
≥ 14000 ≥ 12000	43.4 47.3	62.4 67.2	62.8 67.6	62.9 67.7	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0	63.1 68.0
≥ 10000 ≥ 9000	51.2 52.0	71.9 73.1	72.4 73.5	72.5 73.7	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9	72.7 73.9
≥ 8000 ≥ 7000	54.2 55.1	76.1 77.3	76.6 77.7	76.8 78.0	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2	77.0 78.2
≥ 6000 ≥ 5000	55.8 57.2	78.5 81.5	78.9 82.0	79.1 82.3	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5	79.4 82.5
≥ 4500 ≥ 4000	57.8 59.4	82.4 84.6	82.9 85.5	83.1 85.7	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0	83.3 86.0
≥ 3500 ≥ 3000	59.8 60.5	85.5 86.9	86.6 88.0	86.8 88.2	87.2 88.6	87.2 88.7	87.2 88.7	87.2 88.9	87.2 88.9	87.2 88.9	87.2 88.9	87.2 88.9	87.2 88.9	87.2 88.9	87.2 88.9	87.2 88.9
≥ 2500 ≥ 2000	61.1 61.4	87.5 88.4	89.5 90.6	89.7 90.9	90.3 91.7	90.4 92.0	90.4 92.0	90.8 92.6	90.8 92.6	90.8 92.7	90.8 92.7	90.8 92.7	90.8 92.7	90.8 92.7	90.8 92.7	90.8 92.7
≥ 1800 ≥ 1500	61.5 61.5	88.7 89.4	91.0 91.8	91.2 92.0	92.0 93.0	92.4 93.4	92.4 93.4	92.9 94.0	92.9 94.0	93.0 94.1	93.0 94.1	93.0 94.1	93.0 94.1	93.0 94.1	93.0 94.1	93.0 94.1
≥ 1200 ≥ 1000	61.7 61.7	90.4 90.8	92.9 93.5	93.2 93.9	94.3 95.2	94.7 95.6	94.7 95.8	95.4 96.7	95.5 96.7	95.5 97.0	95.5 97.0	95.5 97.0	95.5 97.0	95.5 97.0	95.5 97.0	95.5 97.0
≥ 900 ≥ 800	61.7 61.7	90.8 90.8	93.5 93.5	93.9 93.9	95.2 95.2	95.6 95.7	95.8 96.0	96.7 97.0	96.7 97.0	97.1 97.6	97.1 97.6	97.1 97.6	97.3 97.8	97.3 97.8	97.3 97.8	97.3 97.8
≥ 700 ≥ 600	61.7 61.7	91.0 91.0	93.8 93.8	94.1 94.1	95.4 95.5	95.9 96.0	96.2 96.5	97.4 97.6	97.4 97.7	98.1 98.5	98.1 98.5	98.1 98.5	98.3 99.0	98.3 99.0	98.3 99.0	98.3 99.0
≥ 500 ≥ 400	61.7 61.7	91.0 91.0	93.8 93.8	94.1 94.1	95.5 95.6	96.3 96.5	96.8 96.9	98.1 98.2	98.2 98.3	98.9 99.1	98.9 99.1	98.9 99.1	99.5 99.7	99.5 99.7	99.5 99.8	99.5 99.8
≥ 300 ≥ 200	61.7 61.7	91.0 91.0	93.8 93.8	94.1 94.1	95.6 95.6	96.5 96.5	96.9 96.9	98.2 98.2	98.3 98.3	99.1 99.1	99.1 99.1	99.1 99.1	99.7 99.7	99.7 99.7	99.8 99.8	99.9 99.9
≥ 100 ≥ 0	61.7 61.7	91.0 91.0	93.8 93.8	94.1 94.1	95.6 95.6	96.5 96.5	97.0 97.0	98.3 98.3	98.4 98.4	99.2 99.2	99.2 99.2	99.2 99.2	99.8 99.8	99.8 99.8	99.9 99.9	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ¾	≥ 5/16	≥ ¼	≥ 0
NO CEILING	40.6	48.0	48.2	48.3	48.4	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.6	48.6	48.6
≥ 20000	49.6	58.6	58.8	59.0	59.2	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.4	59.4
≥ 18000	49.9	58.8	59.1	59.2	59.5	59.5	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.7	59.7
≥ 16000	50.1	59.1	59.4	59.5	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.9	59.9	59.9
≥ 14000	51.1	60.2	60.4	60.6	60.8	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	61.0	61.0	61.0
≥ 12000	54.9	64.3	64.6	64.7	64.9	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.1	65.1	65.1
≥ 10000	61.0	71.0	71.3	71.4	71.6	71.7	71.7	71.7	71.7	71.7	71.8	71.8	71.8	71.8	71.9	71.9
≥ 9000	61.8	72.0	72.2	72.4	72.6	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.8	72.8	72.8
≥ 8000	63.8	74.4	74.6	74.8	75.0	75.1	75.1	75.1	75.1	75.1	75.2	75.2	75.2	75.2	75.3	75.3
≥ 7000	64.7	75.3	75.6	75.7	76.0	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.2	76.2	76.2
≥ 6000	65.9	76.7	77.0	77.2	77.4	77.4	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.6	77.6	77.6
≥ 5000	68.2	79.5	79.8	80.0	80.2	80.3	80.3	80.3	80.3	80.4	80.4	80.4	80.4	80.4	80.5	80.5
≥ 4500	69.1	80.7	81.0	81.2	81.5	81.6	81.6	81.6	81.6	81.7	81.7	81.7	81.7	81.7	81.8	81.8
≥ 4000	71.2	83.3	83.8	84.1	84.4	84.6	84.7	84.7	84.7	84.8	84.8	84.8	84.8	84.9	84.9	84.9
≥ 3500	71.8	84.3	84.9	85.2	85.6	85.8	85.9	86.0	86.0	86.0	86.1	86.1	86.1	86.2	86.2	86.2
≥ 3000	72.5	85.4	86.1	86.4	86.9	87.1	87.3	87.4	87.4	87.5	87.5	87.5	87.6	87.6	87.6	87.6
≥ 2500	73.1	86.4	87.4	87.7	88.2	88.5	88.7	88.8	88.8	88.9	88.9	88.9	89.0	89.0	89.1	89.1
≥ 2000	73.6	87.7	88.8	89.2	89.8	90.1	90.4	90.7	90.7	90.8	90.8	90.8	90.9	91.0	91.0	91.0
≥ 1800	73.8	88.1	89.3	89.7	90.4	90.7	91.0	91.3	91.3	91.5	91.5	91.5	91.6	91.6	91.7	91.7
≥ 1500	74.0	88.6	90.0	90.4	91.3	91.6	92.1	92.4	92.5	92.6	92.7	92.7	92.8	92.8	92.8	92.8
≥ 1200	74.3	89.3	90.6	91.1	92.1	92.5	93.0	93.4	93.7	93.9	94.0	94.0	94.1	94.1	94.2	94.2
≥ 1000	74.4	89.7	91.2	91.7	92.8	93.3	94.0	94.5	94.9	95.4	95.5	95.6	95.7	95.7	95.8	95.8
≥ 900	74.4	89.8	91.3	91.8	92.9	93.4	94.2	94.8	95.2	95.8	96.0	96.0	96.2	96.3	96.3	96.3
≥ 800	74.4	90.0	91.5	92.0	93.2	93.7	94.5	95.2	95.6	96.3	96.6	96.7	96.9	96.9	97.0	97.0
≥ 700	74.5	90.1	91.6	92.2	93.4	93.9	94.8	95.6	96.0	96.7	97.0	97.1	97.4	97.4	97.5	97.5
≥ 600	74.5	90.2	91.7	92.4	93.6	94.2	95.1	95.9	96.4	97.2	97.6	97.7	98.1	98.2	98.3	98.3
≥ 500	74.5	90.2	91.8	92.5	93.7	94.3	95.3	96.2	96.6	97.5	97.8	98.0	98.5	98.5	98.6	98.7
≥ 400	74.5	90.3	91.8	92.5	93.8	94.4	95.4	96.3	96.8	97.6	98.0	98.2	98.7	98.8	98.9	99.0
≥ 300	74.5	90.3	91.8	92.5	93.9	94.5	95.5	96.4	96.9	97.8	98.2	98.4	98.9	99.0	99.2	99.3
≥ 200	74.6	90.3	91.9	92.6	94.0	94.6	95.7	96.6	97.1	98.0	98.5	98.7	99.2	99.2	99.5	99.7
≥ 100	74.6	90.3	91.9	92.6	94.0	94.6	95.7	96.7	97.2	98.2	98.7	98.9	99.4	99.5	99.8	100.0
≥ 0	74.6	90.3	91.9	92.6	94.0	94.6	95.7	96.7	97.2	98.2	98.7	98.9	99.4	99.5	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

APR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥0
NO CEILING	44.2	57.1	57.1	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
≥ 20000	48.7	64.3	64.3	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
≥ 18000	48.8	64.4	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
≥ 16000	48.8	64.4	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
≥ 14000	48.9	64.6	64.6	64.7	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
≥ 12000	50.7	66.4	66.4	66.6	66.7	66.7	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
≥ 10000	56.3	73.0	73.0	73.1	73.2	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 9000	57.2	74.0	74.0	74.1	74.2	74.2	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
≥ 8000	57.7	74.6	74.6	74.7	74.9	74.8	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
≥ 7000	58.6	75.4	75.4	75.6	75.7	75.7	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
≥ 6000	59.1	76.3	76.3	76.4	76.6	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 5000	61.8	79.3	79.3	79.4	79.6	79.6	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
≥ 4500	62.1	79.7	79.7	79.8	79.9	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 4000	63.9	81.8	81.8	81.9	82.0	82.0	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1
≥ 3500	65.0	83.1	83.1	83.2	83.3	83.3	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
≥ 3000	66.0	84.2	84.2	84.3	84.6	84.6	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 2500	66.4	84.4	85.8	86.0	86.4	86.4	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 2000	67.0	86.6	87.0	87.2	87.7	87.7	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
≥ 1800	67.0	87.3	87.8	88.0	88.4	88.6	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 1500	67.0	88.2	88.7	89.0	89.4	89.8	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 1200	67.7	89.3	89.8	90.2	90.9	91.2	91.6	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 1000	67.9	90.0	90.7	91.1	91.8	92.1	92.6	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 900	68.1	90.2	90.9	91.3	92.0	92.3	92.9	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 800	68.2	90.3	91.0	91.4	92.1	92.4	93.0	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 700	68.2	90.4	91.1	91.6	92.2	92.6	93.1	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 600	68.7	90.9	91.6	92.0	92.7	93.0	93.7	94.4	94.4	94.7	94.8	94.8	94.8	94.8	94.8	94.8
≥ 500	68.8	91.1	91.9	92.3	93.1	93.4	94.1	95.2	95.3	95.9	96.0	96.2	96.3	96.3	96.3	96.3
≥ 400	68.8	91.2	92.2	92.7	93.4	93.9	94.6	95.7	96.0	96.6	96.9	97.2	97.3	97.3	97.3	97.3
≥ 300	68.9	91.3	92.4	93.0	93.8	94.2	94.9	96.3	96.7	97.6	97.9	98.2	98.4	98.4	98.4	98.4
≥ 200	68.9	91.3	92.4	93.0	93.9	94.3	95.0	96.7	97.0	97.9	98.3	98.9	99.2	99.2	99.3	99.3
≥ 100	68.9	91.3	92.4	93.0	93.9	94.3	95.0	96.8	97.2	98.2	98.7	99.3	99.7	99.7	99.8	99.8
≥ 0	68.9	91.3	92.4	93.0	93.9	94.3	95.0	96.8	97.2	98.2	98.7	99.3	99.7	99.7	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS LS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	44.6	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.1	55.1
≥ 20000	50.8	64.1	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.3	64.3
≥ 18000	51.1	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.7	64.7
≥ 16000	51.1	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.7	64.7
≥ 14000	51.1	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.7	64.7
≥ 12000	52.2	65.8	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	66.0	66.0
≥ 10000	57.6	71.7	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.2	72.2	72.2	72.2	72.2	72.3	72.3
≥ 9000	57.8	72.2	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.8	72.8	72.8	72.8	72.8	72.9	72.9
≥ 8000	58.8	73.3	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.9	73.9	73.9	73.9	73.9	74.0	74.0
≥ 7000	59.0	73.7	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.2	74.2	74.2	74.2	74.2	74.3	74.3
≥ 6000	60.1	75.1	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.7	75.7	75.7	75.7	75.7	75.8	75.8
≥ 5000	62.0	77.6	78.0	78.0	78.0	78.0	78.0	78.1	78.1	78.2	78.2	78.2	78.2	78.2	78.3	78.3
≥ 4500	63.1	78.7	79.1	79.1	79.1	79.1	79.1	79.2	79.2	79.3	79.3	79.3	79.3	79.3	79.4	79.4
≥ 4000	64.9	81.0	81.4	81.4	81.6	81.6	81.6	81.7	81.7	81.8	81.8	81.8	81.8	81.8	81.9	81.9
≥ 3500	65.7	81.9	82.4	82.4	82.6	82.6	82.6	82.7	82.7	82.8	82.8	82.8	82.8	82.8	82.9	82.9
≥ 3000	66.8	83.3	84.1	84.1	84.3	84.3	84.3	84.4	84.4	84.6	84.6	84.6	84.6	84.6	84.7	84.7
≥ 2500	67.2	84.0	84.8	84.8	85.1	85.1	85.1	85.2	85.2	85.3	85.3	85.3	85.3	85.3	85.4	85.4
≥ 2000	67.3	85.1	85.9	86.0	86.3	86.4	86.6	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.9	86.9
≥ 1800	67.8	86.0	86.8	86.9	87.3	87.4	87.6	87.7	87.7	87.8	87.8	87.8	87.8	87.8	87.9	87.9
≥ 1500	68.0	87.1	87.9	88.0	88.4	88.8	89.0	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.3	89.3
≥ 1200	68.7	88.2	89.0	89.2	89.9	90.3	90.6	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.9	90.9
≥ 1000	69.1	89.0	89.8	90.0	90.7	91.1	91.8	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.2	92.2
≥ 900	69.4	89.4	90.2	90.4	91.1	91.6	92.3	92.6	92.6	92.7	92.7	92.7	92.7	92.7	92.8	92.8
≥ 800	69.4	89.4	90.3	90.6	91.2	91.7	92.6	92.8	92.8	92.9	92.9	92.9	92.9	92.9	93.0	93.0
≥ 700	69.6	89.6	90.4	90.7	91.4	91.9	92.8	93.3	93.3	93.4	93.4	93.4	93.4	93.4	93.6	93.6
≥ 600	69.8	89.9	90.9	91.1	91.9	92.3	93.2	93.8	93.8	94.0	94.0	94.1	94.1	94.1	94.2	94.2
≥ 500	69.9	90.2	91.4	91.7	92.7	93.1	94.1	94.8	94.8	95.3	95.6	95.7	95.7	95.7	95.8	95.8
≥ 400	69.9	90.3	91.6	91.8	93.0	93.4	94.9	95.7	95.7	96.4	96.9	97.0	97.1	97.3	97.3	97.4
≥ 300	70.0	90.4	91.7	91.9	93.1	93.6	95.0	96.0	96.0	96.9	97.6	97.7	97.8	98.2	98.2	98.3
≥ 200	70.0	90.4	91.8	92.0	93.2	93.9	95.4	96.4	96.4	97.3	98.0	98.1	98.2	98.8	98.9	99.0
≥ 100	70.0	90.4	91.8	92.0	93.2	93.9	95.4	96.4	96.4	97.6	98.3	98.4	98.6	99.1	99.2	99.4
≥ 0	70.0	90.4	91.8	92.0	93.2	93.9	95.4	96.4	96.4	97.6	98.3	98.4	98.7	99.2	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM 10-14-5 (OL A)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

APR

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0600-0800
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	46.4	46.8	46.8	47.1	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
≥ 20000	56.0	56.3	56.4	56.9	57.0	57.0	57.0	57.1	57.1	57.1	57.1	57.1	57.1	57.2	57.2	57.2
≥ 18000	56.4	56.8	56.9	57.3	57.4	57.4	57.4	57.6	57.6	57.6	57.6	57.6	57.6	57.7	57.7	57.7
≥ 16000	56.4	56.8	56.9	57.3	57.4	57.4	57.4	57.6	57.6	57.6	57.6	57.6	57.6	57.7	57.7	57.7
≥ 14000	57.6	57.9	58.0	58.4	58.6	58.6	58.6	58.7	58.7	58.7	58.7	58.7	58.7	58.8	58.8	58.8
≥ 12000	60.9	61.2	61.3	61.8	61.9	61.9	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.1	62.1	62.1
≥ 10000	67.9	68.4	68.6	69.0	69.1	69.1	69.1	69.2	69.2	69.2	69.2	69.2	69.2	69.4	69.4	69.6
≥ 9000	69.0	69.6	69.7	70.1	70.2	70.2	70.2	70.3	70.3	70.3	70.3	70.3	70.3	70.6	70.6	70.7
≥ 8000	70.7	71.3	71.4	71.9	72.0	72.0	72.0	72.1	72.1	72.1	72.1	72.1	72.1	72.3	72.3	72.4
≥ 7000	71.8	72.4	72.6	73.0	73.1	73.1	73.1	73.2	73.2	73.2	73.2	73.2	73.2	73.4	73.4	73.6
≥ 6000	72.6	73.2	73.3	73.9	74.0	74.0	74.0	74.1	74.1	74.1	74.1	74.1	74.1	74.3	74.3	74.4
≥ 5000	75.1	75.9	76.0	76.6	76.7	76.7	76.7	76.8	76.8	76.8	76.8	76.8	76.8	77.0	77.0	77.1
≥ 4500	76.0	77.2	77.3	77.9	78.0	78.0	78.0	78.1	78.1	78.1	78.1	78.1	78.1	78.3	78.3	78.4
≥ 4000	77.6	79.0	79.1	79.7	79.9	79.9	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.2	80.2	80.3
≥ 3500	79.2	80.7	80.8	81.3	81.7	81.8	81.8	81.9	81.9	81.9	81.9	81.9	81.9	82.1	82.1	82.2
≥ 3000	80.0	81.7	81.9	82.7	83.0	83.1	83.1	83.2	83.2	83.2	83.2	83.2	83.2	83.4	83.4	83.6
≥ 2500	80.8	83.1	83.4	84.3	84.8	84.9	84.9	85.0	85.0	85.0	85.0	85.0	85.0	85.2	85.2	85.3
≥ 2000	81.7	84.0	84.3	85.3	85.8	85.9	86.1	86.6	86.6	86.6	86.6	86.7	86.7	86.9	86.9	87.1
≥ 1800	82.0	84.4	84.8	85.8	86.3	86.4	86.7	87.1	87.1	87.1	87.2	87.2	87.2	87.4	87.4	87.7
≥ 1500	83.0	86.2	86.6	87.6	88.4	88.6	88.8	89.2	89.2	89.2	89.3	89.3	89.3	89.6	89.6	89.8
≥ 1200	83.2	86.9	87.7	88.8	89.8	89.9	90.2	90.7	90.9	90.9	91.0	91.0	91.0	91.2	91.2	91.4
≥ 1000	83.6	87.7	88.4	89.7	90.7	90.8	91.3	91.8	92.0	92.0	92.2	92.2	92.2	92.4	92.4	92.7
≥ 900	83.7	87.8	88.6	89.8	90.8	90.9	91.4	91.9	92.1	92.1	92.3	92.3	92.3	92.6	92.6	92.8
≥ 800	83.7	87.8	88.6	89.8	90.9	91.0	91.6	92.0	92.2	92.2	92.4	92.4	92.4	92.7	92.7	92.9
≥ 700	83.7	87.8	88.8	90.2	91.3	91.4	92.0	92.4	92.7	92.8	93.0	93.0	93.0	93.2	93.2	93.4
≥ 600	83.8	88.1	89.2	90.8	92.2	92.6	93.1	93.7	93.9	94.0	94.2	94.3	94.3	94.6	94.6	94.8
≥ 500	83.8	88.4	89.6	91.2	92.7	93.0	93.7	94.3	94.7	94.9	95.2	95.3	95.3	95.6	95.6	95.8
≥ 400	83.9	88.7	89.9	91.6	93.0	93.3	94.1	94.9	95.2	95.7	96.2	96.4	96.7	96.9	96.9	97.2
≥ 300	83.9	88.8	90.1	91.8	93.3	93.7	94.6	95.4	95.8	96.3	96.9	97.2	97.4	97.9	98.0	98.4
≥ 200	83.9	88.8	90.1	91.8	93.7	94.0	94.9	95.8	96.2	96.9	97.4	97.8	98.0	98.6	98.8	99.3
≥ 100	83.9	88.8	90.1	91.8	93.7	94.0	95.0	95.9	96.3	97.2	97.8	98.1	98.4	99.0	99.2	99.9
≥ 0	83.9	88.8	90.1	91.8	93.7	94.0	95.0	95.9	96.3	97.2	97.8	98.1	98.4	99.0	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	47.8	48.0	48.1	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3
≥ 20000	55.7	55.9	56.0	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
≥ 18000	56.2	56.4	56.6	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 16000	56.2	56.4	56.6	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8
≥ 14000	56.7	56.9	57.0	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2
≥ 12000	61.2	61.6	61.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
≥ 10000	67.1	67.4	67.6	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8
≥ 9000	67.8	68.1	68.2	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 8000	71.0	71.6	71.7	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
≥ 7000	71.8	72.4	72.6	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
≥ 6000	73.2	74.1	74.2	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
≥ 5000	76.0	77.0	77.1	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 4500	77.4	78.4	78.6	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 4000	78.9	80.3	80.4	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 3500	79.9	81.3	81.4	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 3000	81.6	83.1	83.2	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 2500	82.6	84.6	84.7	85.1	85.2	85.4	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6
≥ 2000	84.0	86.7	86.8	87.2	87.3	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 1800	84.1	86.8	86.9	87.3	87.4	87.7	87.8	87.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
≥ 1500	84.4	87.9	88.0	88.6	88.7	89.0	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 1200	84.7	88.6	88.8	89.6	90.1	90.4	90.8	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 1000	85.0	89.1	89.8	90.9	91.4	91.8	92.3	92.6	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8
≥ 900	85.2	89.6	90.2	91.6	92.1	92.4	93.0	93.2	93.3	93.4	93.6	93.6	93.6	93.6	93.6	93.6
≥ 800	85.2	89.8	90.6	92.1	92.9	93.2	93.8	94.1	94.2	94.3	94.6	94.6	94.6	94.6	94.6	94.6
≥ 700	85.6	90.3	91.1	92.7	93.6	93.9	94.4	95.0	95.1	95.2	95.4	95.4	95.4	95.4	95.4	95.4
≥ 600	85.7	90.9	91.8	93.3	94.2	94.6	95.1	95.7	95.8	96.1	96.4	96.4	96.6	96.8	96.8	96.8
≥ 500	85.7	91.0	91.9	93.4	94.8	95.1	95.7	96.2	96.3	96.8	97.1	97.1	97.4	97.7	97.7	97.7
≥ 400	85.7	91.0	92.1	93.7	95.0	95.3	95.9	96.6	96.7	97.1	97.7	97.7	98.1	98.4	98.6	98.6
≥ 300	85.7	91.0	92.1	93.9	95.3	95.7	96.3	97.0	97.1	97.7	98.2	98.2	98.7	99.0	99.1	99.2
≥ 200	85.7	91.0	92.1	93.9	95.3	95.7	96.3	97.0	97.1	97.8	98.3	98.3	98.8	99.1	99.2	99.3
≥ 100	85.7	91.0	92.1	93.9	95.3	95.7	96.3	97.0	97.1	97.8	98.4	98.6	99.2	99.6	99.7	99.8
≥ 0	85.7	91.0	92.1	93.9	95.3	95.7	96.3	97.0	97.1	97.8	98.6	98.7	99.4	99.8	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
≥ 20000	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
≥ 18000	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1
≥ 16000	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1
≥ 14000	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2	52.2
≥ 12000	54.9	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
IV 10000	58.7	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
IV 9000	59.3	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
IV 8000	63.1	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
IV 7000	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
IV 6000	69.8	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
IV 5000	75.3	75.6	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7
IV 4500	77.0	77.2	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
IV 4000	80.8	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
IV 3500	82.0	82.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
IV 3000	84.1	84.9	85.0	85.0	85.0	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
IV 2500	85.6	86.6	86.7	86.8	86.8	87.0	87.0	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2
IV 2000	86.9	88.4	88.6	88.7	88.7	88.9	88.9	89.0	89.0	89.2	89.2	89.2	89.2	89.2	89.2	89.2
IV 1800	87.1	88.8	88.9	89.0	89.0	89.2	89.2	89.3	89.3	89.6	89.6	89.6	89.6	89.6	89.6	89.6
IV 1500	87.4	89.7	89.9	90.0	90.0	90.3	90.3	90.4	90.4	90.7	90.8	90.8	90.8	90.8	90.8	90.8
IV 1200	88.1	91.0	91.2	91.6	91.7	92.0	92.2	92.3	92.3	92.6	92.7	92.7	92.7	92.7	92.7	92.7
IV 1000	88.6	91.8	92.1	92.7	93.0	93.4	93.8	94.1	94.2	94.3	94.8	94.9	94.9	95.0	95.0	95.0
IV 900	88.6	91.9	92.3	93.0	93.3	93.8	94.1	94.2	94.3	94.8	94.9	94.9	94.9	95.0	95.0	95.0
IV 800	88.7	92.0	92.4	93.1	93.7	94.1	94.7	94.9	95.0	95.4	95.6	95.7	95.8	95.8	95.8	95.8
IV 700	88.7	92.1	92.8	93.6	94.2	94.7	95.2	95.6	95.7	96.3	96.4	96.7	96.8	96.8	96.8	96.8
IV 600	88.7	92.2	92.9	93.7	94.3	94.8	95.3	95.7	95.8	96.7	96.8	97.1	97.2	97.3	97.3	97.3
IV 500	88.8	92.3	93.3	94.3	95.0	95.6	96.2	96.6	96.7	97.6	97.7	98.0	98.1	98.2	98.2	98.2
IV 400	88.8	92.6	93.6	94.6	95.2	95.8	96.4	96.8	96.9	97.8	98.3	98.7	98.8	98.9	99.1	99.1
IV 300	88.8	92.6	93.6	94.5	95.2	95.8	96.4	96.8	96.9	97.8	98.3	98.7	98.8	98.9	99.0	99.4
IV 200	88.8	92.6	93.6	94.7	95.3	95.9	96.6	96.9	97.2	98.1	98.7	99.0	99.2	99.3	99.3	99.8
IV 100	88.8	92.6	93.6	94.7	95.3	95.9	96.6	96.9	97.2	98.1	98.7	99.0	99.3	99.6	99.9	100.0
IV 0	88.8	92.6	93.6	94.7	95.3	95.9	96.6	96.9	97.2	98.1	98.7	99.0	99.3	99.6	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

APR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	¾	≥0
NO CEILING	38.0	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
≥ 20000	49.2	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
IV 18000	49.7	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
IV 16000	49.7	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
IV 14000	50.4	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
IV 12000	54.0	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
IV 10000	59.2	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
IV 9000	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
IV 8000	61.8	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
IV 7000	64.4	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
IV 6000	70.8	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
IV 5000	77.2	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
IV 4500	78.2	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
IV 4000	81.4	81.8	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
IV 3500	83.7	84.0	84.1	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2
IV 3000	85.4	86.0	86.1	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
IV 2500	86.9	87.6	87.9	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
IV 2000	88.2	89.4	89.8	90.0	90.0	90.1	90.1	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.2
IV 1800	88.4	89.7	90.0	90.2	90.2	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
IV 1500	89.8	91.8	92.2	92.4	92.8	93.0	93.0	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
IV 1200	90.8	93.1	93.6	93.8	94.1	94.3	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
IV 1000	91.2	93.8	94.3	94.7	95.1	95.3	95.4	95.4	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7
IV 900	91.2	93.8	94.3	94.7	95.2	95.6	95.7	95.7	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9
IV 800	91.3	93.9	94.4	94.8	95.3	95.7	95.8	95.8	96.0	96.1	96.1	96.2	96.2	96.2	96.2	96.2
IV 700	91.4	94.0	94.8	95.1	95.7	96.0	96.2	96.3	96.7	97.1	97.1	97.3	97.3	97.3	97.3	97.3
IV 600	91.7	94.3	95.1	95.4	96.0	96.3	96.6	96.7	97.0	97.4	97.4	97.8	97.8	97.8	97.8	97.8
IV 500	91.8	94.6	95.3	95.8	96.3	96.7	96.9	97.1	97.4	98.0	98.2	98.7	98.8	98.8	98.8	98.8
IV 400	91.8	94.6	95.3	95.8	96.3	96.7	96.9	97.1	97.4	98.1	98.3	98.9	99.2	99.2	99.4	99.4
IV 300	91.8	94.6	95.3	95.8	96.3	96.7	96.9	97.1	97.4	98.1	98.3	98.9	99.3	99.3	99.7	99.7
IV 200	91.8	94.6	95.3	95.8	96.3	96.7	96.9	97.1	97.6	98.3	98.6	99.2	99.7	99.7	100.0	100.0
IV 100	91.8	94.6	95.3	95.8	96.3	96.7	96.9	97.1	97.6	98.3	98.6	99.2	99.7	99.7	100.0	100.0
IV 0	91.8	94.6	95.3	95.8	96.3	96.7	96.9	97.1	97.6	98.3	98.6	99.2	99.7	99.7	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

APR

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS 151

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/32	≥ 0
NO CEILING	41.9	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
≥ 20000	52.1	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4
≥ 18000	52.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000	52.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 14000	53.0	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
≥ 12000	57.6	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 10000	64.8	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 9000	65.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
≥ 8000	67.7	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
≥ 7000	69.1	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
≥ 6000	72.3	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 5000	75.9	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
≥ 4500	77.8	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 4000	80.3	85.8	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
≥ 3500	81.9	87.4	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
≥ 3000	83.9	89.6	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
≥ 2500	84.3	90.9	91.2	91.2	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 2000	84.9	92.1	92.6	92.7	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.1	93.1	93.1	93.1	93.1
≥ 1800	85.2	92.8	93.2	93.3	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.8	93.8	93.8	93.8	93.8
≥ 1500	85.7	93.2	94.0	94.1	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.6	94.6	94.6	94.6	94.6
≥ 1200	86.0	93.6	94.3	94.6	94.9	94.9	95.1	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3
≥ 1000	86.1	94.0	95.0	95.4	95.8	95.8	96.0	96.1	96.1	96.1	96.1	96.2	96.2	96.2	96.2	96.2
≥ 900	86.2	94.1	95.1	95.6	95.9	95.9	96.1	96.3	96.3	96.3	96.3	96.4	96.4	96.4	96.4	96.4
≥ 800	86.6	94.4	95.4	96.0	96.3	96.3	96.6	96.8	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2
≥ 700	86.9	94.9	95.9	96.4	96.8	96.8	97.0	97.2	97.7	97.7	97.7	97.8	97.9	97.9	97.9	97.9
≥ 600	86.9	94.9	96.0	96.6	96.9	96.9	97.1	97.4	98.0	98.1	98.2	98.3	98.3	98.3	98.3	98.3
≥ 500	87.0	95.0	96.1	96.8	97.1	97.1	97.3	97.7	98.2	98.4	98.7	98.9	99.0	99.0	99.0	99.0
≥ 400	87.0	95.1	96.2	96.9	97.2	97.2	97.4	97.9	98.4	98.7	99.0	99.2	99.3	99.3	99.3	99.3
≥ 300	87.0	95.1	96.2	96.9	97.2	97.2	97.6	98.0	98.6	98.8	99.1	99.3	99.6	99.7	99.8	99.9
≥ 200	87.0	95.1	96.2	96.9	97.2	97.2	97.6	98.0	98.6	98.8	99.2	99.4	99.7	99.8	99.9	100.0
≥ 100	87.0	95.1	96.2	96.9	97.2	97.2	97.6	98.0	98.6	98.8	99.2	99.4	99.7	99.8	99.9	100.0
≥ 0	87.0	95.1	96.2	96.9	97.2	97.2	97.6	98.0	98.6	98.8	99.2	99.4	99.7	99.8	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

APR

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS CST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 5/16	≥ 0
NO CEILING	39.9	52.0	52.2	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3	52.3
≥ 20000	45.3	60.6	60.8	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
≥ 18000	45.6	60.8	61.0	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 16000	45.6	60.8	61.0	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 14000	46.1	61.3	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 12000	49.4	65.2	65.4	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
≥ 10000	54.8	71.2	71.4	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 9000	55.8	72.2	72.4	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 8000	57.0	73.6	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
≥ 7000	58.3	75.2	75.4	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
≥ 6000	59.7	76.6	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
≥ 5000	63.0	80.6	80.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
≥ 4500	63.6	81.1	81.3	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
≥ 4000	65.6	83.7	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 3500	66.4	85.1	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
≥ 3000	67.2	86.2	86.6	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
≥ 2500	67.7	87.1	87.4	87.8	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
≥ 2000	67.9	87.6	88.0	88.7	89.0	89.0	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
≥ 1800	67.9	87.9	88.4	89.2	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 1500	68.4	89.1	89.8	90.6	90.9	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 1200	69.1	89.8	90.6	91.3	92.0	92.3	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 1000	69.1	90.1	90.9	91.7	92.4	92.9	93.0	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 900	69.1	90.1	90.9	91.7	92.4	92.9	93.0	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 800	69.3	90.6	91.4	92.3	93.1	93.6	93.7	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 700	69.3	90.7	91.6	92.4	93.2	93.7	93.8	94.2	94.2	94.4	94.4	94.6	94.6	94.6	94.6	94.6
≥ 600	70.1	91.4	92.4	93.4	94.2	94.7	94.9	95.6	95.8	96.0	96.0	96.2	96.2	96.2	96.2	96.2
≥ 500	70.3	92.0	93.0	94.0	94.9	95.3	95.9	96.7	96.9	97.1	97.1	97.7	97.7	97.7	97.8	97.8
≥ 400	70.3	92.2	93.2	94.2	95.3	95.9	96.4	97.2	97.4	97.9	97.9	98.4	98.4	98.4	98.6	98.6
≥ 300	70.3	92.3	93.3	94.3	95.7	96.2	97.0	98.0	98.2	98.8	98.8	99.3	99.4	99.4	99.6	99.6
≥ 200	70.3	92.3	93.3	94.3	95.7	96.4	97.2	98.2	98.4	99.0	99.0	99.6	99.7	99.7	99.8	99.8
≥ 100	70.3	92.3	93.3	94.3	95.7	96.4	97.2	98.2	98.4	99.0	99.1	99.7	99.8	99.8	99.9	99.9
≥ 0	70.3	92.3	93.3	94.3	95.7	96.4	97.2	98.2	98.4	99.1	99.2	99.8	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

APR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS 1-24

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING	42.9	47.7	47.7	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.9	47.9
≥ 20000	51.2	57.2	57.3	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.5	57.5
≥ 18000	51.6	57.6	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
≥ 16000	51.6	57.6	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
≥ 14000	52.0	58.0	58.1	58.2	58.2	58.2	58.2	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3
≥ 12000	55.1	61.3	61.4	61.5	61.5	61.5	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
≥ 10000	60.8	67.3	67.4	67.5	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.7	67.7
≥ 9000	61.5	68.1	68.2	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.4	68.4	68.4	68.4	68.4	68.4
≥ 8000	63.5	70.2	70.3	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.5	70.5
≥ 7000	64.8	71.6	71.7	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.9	71.9	71.9	71.9	71.9	71.9
≥ 6000	67.2	74.1	74.2	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.5	74.5
≥ 5000	70.8	78.0	78.1	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.4	78.4
≥ 4500	71.9	79.2	79.3	79.4	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.6	79.6
≥ 4000	74.2	81.8	82.0	82.1	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.3	82.3
≥ 3500	75.5	83.3	83.4	83.6	83.6	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.8
≥ 3000	76.9	84.9	85.1	85.3	85.4	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.6	85.6
≥ 2500	77.7	86.2	86.5	86.8	87.0	87.1	87.1	87.1	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2
≥ 2000	78.5	87.5	87.9	88.2	88.5	88.6	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.9	88.9
≥ 1800	78.7	88.0	88.3	88.7	89.0	89.1	89.2	89.3	89.3	89.3	89.4	89.4	89.4	89.4	89.4	89.5
≥ 1500	79.2	89.2	89.6	90.0	90.4	90.6	90.7	90.8	90.8	90.8	90.9	90.9	90.9	90.9	91.0	91.0
≥ 1200	79.8	90.1	90.6	91.1	91.7	91.9	92.2	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.5	92.5
≥ 1000	80.1	90.7	91.4	92.0	92.6	92.9	93.3	93.5	93.6	93.6	93.6	93.7	93.7	93.7	93.8	93.8
≥ 900	80.2	90.9	91.6	92.3	92.9	93.2	93.6	93.8	93.9	94.0	94.0	94.1	94.1	94.1	94.1	94.2
≥ 800	80.3	91.0	91.8	92.5	93.2	93.5	93.9	94.3	94.4	94.4	94.5	94.6	94.6	94.6	94.7	94.7
≥ 700	80.4	91.2	92.1	92.8	93.6	93.9	94.3	94.8	94.9	95.1	95.2	95.3	95.3	95.3	95.3	95.4
≥ 600	80.7	91.6	92.5	93.3	94.1	94.4	94.9	95.4	95.6	95.9	96.0	96.1	96.2	96.3	96.3	96.3
≥ 500	80.8	91.8	92.8	93.7	94.6	94.9	95.3	96.1	96.3	96.8	96.9	97.2	97.3	97.4	97.4	97.4
≥ 400	80.8	92.0	93.0	93.9	94.8	95.2	95.8	96.5	96.7	97.3	97.7	97.9	98.1	98.2	98.3	98.4
≥ 300	80.8	92.0	93.1	94.0	95.0	95.4	96.1	96.8	97.1	97.7	98.0	98.4	98.8	99.1	99.3	99.6
≥ 200	80.8	92.0	93.1	94.0	95.1	95.5	96.2	97.0	97.3	98.0	98.4	98.8	99.1	99.3	99.4	99.6
≥ 100	80.8	92.0	93.1	94.0	95.1	95.5	96.3	97.0	97.4	98.1	98.6	99.0	99.3	99.5	99.7	99.8
≥ 0	80.8	92.0	93.1	94.0	95.1	95.5	96.3	97.0	97.4	98.1	98.6	99.0	99.3	99.6	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

7200

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1	≥ 0
NO CEILING	47.3	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
≥ 20000	53.7	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
≥ 18000	53.9	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
≥ 16000	54.1	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
≥ 14000	54.4	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
≥ 12000	57.7	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 10000	61.5	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 9000	62.2	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
≥ 8000	62.9	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
≥ 7000	64.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 6000	64.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
≥ 5000	67.0	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
≥ 4500	67.4	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 4000	68.5	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 3500	69.8	88.6	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 3000	70.5	89.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 2500	71.2	90.4	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2000	71.7	91.2	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 1800	71.8	91.9	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 1500	72.5	92.9	93.9	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 1200	73.1	94.1	95.2	95.4	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 1000	73.4	94.7	96.2	96.5	96.8	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 900	73.4	94.7	96.2	96.5	96.8	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 800	73.5	94.9	96.5	96.7	97.1	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 700	73.9	95.6	97.3	97.5	98.0	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 600	74.1	95.8	97.7	98.0	98.4	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	74.1	95.8	98.0	98.2	98.6	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 400	74.1	95.8	98.0	98.2	98.6	98.8	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 300	74.1	95.8	98.1	98.3	98.8	99.1	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 200	74.1	95.9	98.2	98.4	99.0	99.4	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	74.1	95.9	98.2	98.4	99.0	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	74.1	95.9	98.2	98.4	99.0	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/ GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	>6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥1/16
NO CEILING	47.8	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 20000	53.9	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 18000	53.9	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 15000	54.1	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 14000	54.5	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 12000	57.3	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 10000	63.5	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1
≥ 9000	64.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 8000	68.0	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
≥ 7000	68.8	78.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 6000	70.4	80.2	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
≥ 5000	73.4	83.9	84.0	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
≥ 4500	74.1	84.7	84.8	84.8	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
≥ 4000	75.3	86.1	86.2	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
≥ 3500	75.8	86.9	87.4	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 3000	76.7	88.0	88.5	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 2500	77.4	88.7	89.2	89.2	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 2000	78.4	90.0	90.6	90.6	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 1800	78.4	90.4	91.3	91.3	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 1500	78.8	91.4	92.4	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 1200	79.6	92.7	94.2	94.2	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 1000	79.9	93.2	94.8	94.8	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 900	80.2	93.5	95.2	95.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 800	80.4	94.0	95.7	95.7	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 700	80.8	94.4	96.1	96.1	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 600	81.2	94.9	97.0	97.0	97.4	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 500	81.5	95.3	97.6	97.6	98.1	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 400	81.5	95.3	97.7	97.7	98.2	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 300	81.6	95.6	98.2	98.2	98.7	99.1	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 200	81.9	95.9	98.6	98.6	99.2	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	81.9	95.9	98.6	98.6	99.2	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	81.9	95.9	98.6	98.6	99.2	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (GL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800

CEILING FEET	VISIBILITY (STATUTE MILES)														
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 0	≥ 0
NO CEILING	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
≥ 20000	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
≥ 18000	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6
≥ 16000	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6
≥ 14000	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
≥ 12000	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
≥ 10000	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
≥ 9000	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
≥ 8000	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
≥ 7000	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2
≥ 6000	81.0	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
≥ 5000	82.8	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 4500	82.9	83.4	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
≥ 4000	84.1	84.7	84.9	84.9	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 3500	85.2	86.0	86.2	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
≥ 3000	86.6	88.0	88.2	88.3	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
≥ 2500	87.2	88.7	88.9	89.0	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 2000	88.1	89.9	90.3	90.4	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 1800	88.2	90.1	90.6	90.8	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 1500	88.3	90.5	91.3	91.5	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1200	89.1	92.2	92.9	93.1	93.9	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1000	90.0	93.0	93.8	94.2	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 900	90.0	93.3	94.1	94.5	95.5	95.5	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 850	90.4	93.8	94.5	94.9	95.9	95.9	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 700	90.6	94.1	94.8	95.3	96.5	96.5	96.5	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 600	91.5	95.1	95.8	96.2	97.5	97.6	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 500	91.5	95.1	95.8	96.2	97.5	97.8	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 400	91.5	95.1	95.8	96.2	97.6	98.1	98.1	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 300	91.7	95.4	96.6	97.0	98.5	98.9	98.9	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200	91.7	95.6	96.8	97.3	98.8	99.2	99.5	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	91.7	95.6	96.8	97.3	98.8	99.2	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	91.7	95.6	96.8	97.3	98.8	99.2	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
(STATION)

MALNSTRUM AFB MT/GREAT FALLS
STATION NAME

08-77
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0900-1100
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≤ 0
NO CEILING ≥ 20000	50.4 58.7	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8	50.5 58.8
≥ 18000 ≥ 16000	58.8 59.1	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2	58.9 59.2
≥ 14000 ≥ 12000	59.5 63.0	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2	59.6 63.2
≥ 10000 ≥ 9000	70.0 71.7	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9	70.2 71.9
≥ 8000 ≥ 7000	74.7 76.0	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2	74.9 76.2
≥ 6000 ≥ 5000	78.1 80.8	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3	78.4 81.3
≥ 4500 ≥ 4000	81.5 83.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3	82.4 84.3
≥ 3500 ≥ 3000	84.5 85.7	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2	85.5 87.2
≥ 2500 ≥ 2000	86.9 89.0	88.4 90.8	88.5 91.1	88.5 91.2	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3	88.5 91.3
≥ 1800 ≥ 1500	89.5 90.6	91.2 92.4	91.5 92.8	91.6 92.9	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1	91.8 93.1
≥ 1200 ≥ 1000	91.9 92.7	94.3 95.7	94.9 96.5	95.1 96.6	95.4 97.0	95.4 97.0	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1	95.4 97.1
≥ 900 ≥ 800	92.8 92.9	96.0 96.2	96.8 97.0	96.9 97.1	97.3 97.5	97.3 97.5	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6	97.4 97.6
≥ 700 ≥ 600	93.1 93.4	96.7 97.1	97.4 98.0	97.5 98.1	98.0 98.6	98.0 98.6	98.1 98.7	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8	98.1 98.8
≥ 500 ≥ 400	93.5 93.7	97.4 97.5	98.4 98.5	98.5 98.6	99.0 99.1	99.1 99.2	99.2 99.4	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.6	99.4 99.6	99.4 99.6
≥ 300 ≥ 200	93.7 93.7	97.5 97.5	98.5 98.5	98.6 98.6	99.1 99.1	99.2 99.2	99.4 99.4	99.6 99.6	99.7 99.7	99.7 99.8	99.7 99.8	99.7 99.8	99.7 99.8	99.8 99.9	99.8 100.0	99.8 100.0
≥ 100 ≥ 0	93.7 93.7	97.5 97.5	98.5 98.5	98.6 98.6	99.1 99.1	99.2 99.2	99.4 99.4	99.6 99.6	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.9 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM 54

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/4AC

CEILING VERSUS VISIBILITY

24112

MALMSTRUM AFB MT/GREAT FALLS

68-77

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 20000	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2
≥ 18000	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
≥ 16000	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5
≥ 14000	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 12000	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 10000	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 9000	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
≥ 8000	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 7000	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
≥ 6000	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
≥ 5000	77.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 4500	79.6	79.7	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 4000	83.4	83.7	83.8	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 3½	85.6	85.8	85.9	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
≥ 3000	87.6	88.3	88.4	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 2500	89.5	90.3	90.4	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 2000	91.7	92.9	93.1	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1800	91.9	93.2	93.7	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 1500	92.7	94.5	95.2	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 1200	93.8	95.8	96.7	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 1000	93.8	96.5	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 900	93.8	96.5	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 800	93.8	96.5	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 700	93.9	96.7	98.0	98.2	98.2	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 600	94.0	96.9	98.3	98.6	98.6	98.8	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 500	94.0	97.0	98.4	98.7	99.0	99.4	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 400	94.0	97.0	98.6	98.9	99.2	99.7	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	94.0	97.0	98.6	98.9	99.2	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	94.0	97.0	98.6	98.9	99.2	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	94.0	97.0	98.6	98.9	99.2	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	94.0	97.0	98.6	98.9	99.2	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

1500-1700
TIME PERIOD

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.0	≥ 0.5	≥ 0.25	≥ 0.15	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01
NO CEILING	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2	41.2
≥ 20000	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
≥ 18000	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
≥ 16000	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
≥ 14000	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
≥ 12000	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
≥ 10000	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 9000	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
≥ 8000	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
≥ 7000	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 6000	73.9	73.9	73.9	73.9	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0
≥ 5000	80.6	81.4	81.4	81.4	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5
≥ 4500	82.3	83.0	83.0	83.0	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
≥ 4000	85.7	86.6	86.9	87.0	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 3500	87.2	88.3	88.6	88.7	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 3000	89.0	90.2	90.5	90.6	90.9	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2500	90.1	91.5	91.8	91.9	92.2	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 2000	91.4	93.2	93.5	93.8	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1800	91.6	93.5	93.9	94.1	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 1500	93.0	95.5	95.9	96.2	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200	93.5	96.1	96.6	97.1	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 1000	93.7	96.2	96.7	97.2	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 900	93.7	96.2	96.8	97.3	97.8	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 800	94.2	96.9	97.4	98.0	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 700	94.2	97.1	97.8	98.4	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 600	94.2	97.2	98.2	98.7	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500	94.2	97.4	98.6	99.1	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	94.2	97.4	98.6	99.1	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	94.2	97.4	98.6	99.1	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	94.2	97.4	98.6	99.1	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	94.2	97.4	98.6	99.1	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	94.2	97.4	98.6	99.1	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

1800-2000

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 0	≥ 0
NO CEILING ≥ 20000	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4	47.6 59.4
≥ 18000 ≥ 16000	59.8 59.8	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9	59.9 59.9
≥ 14000 ≥ 12000	60.3 63.9	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0	60.4 64.0
≥ 10000 ≥ 9000	71.1 72.8	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0	71.2 73.0
≥ 8000 ≥ 7000	75.2 76.7	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9	75.4 76.9
≥ 6000 ≥ 5000	81.5 85.2	81.8 85.5	81.8 85.5	81.8 85.5	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6	81.9 85.6
≥ 4500 ≥ 4000	86.5 88.9	86.9 89.8	86.9 89.9	86.9 89.9	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0	87.0 90.0
≥ 3500 ≥ 3000	90.3 91.1	91.4 92.2	91.5 92.3	91.5 92.3	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4	91.6 92.4
≥ 2500 ≥ 2000	92.5 93.1	94.0 94.8	94.1 94.9	94.1 95.1	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2	94.2 95.2
≥ 1800 ≥ 1500	93.3 93.9	95.3 96.2	95.6 96.6	95.7 96.8	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0	95.8 97.0
≥ 1200 ≥ 1000	94.1 94.4	96.8 97.4	97.1 97.8	97.4 98.3	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5	97.6 98.5
≥ 900 ≥ 800	94.5 94.5	97.7 97.7	98.2 98.2	98.7 98.7	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9
≥ 700 ≥ 600	94.5 94.5	98.0 98.2	98.4 98.7	98.9 99.2	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5
≥ 500 ≥ 400	94.7 94.7	98.5 98.5	99.0 99.0	99.6 99.6	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9
≥ 300 ≥ 200	94.7 94.7	98.5 98.5	99.0 99.0	99.6 99.6	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0	99.9 100.0
≥ 100 ≥ 0	94.7 94.7	98.5 98.5	99.0 99.0	99.6 99.6	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

MAY

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≤ 0
NO CEILING ≥ 20000	44.0 49.0	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5	55.8 61.5
≥ 18000 ≥ 16000	49.4 49.6	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0	61.8 62.0
≥ 14000 ≥ 12000	50.0 54.5	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2	62.5 67.2
≥ 10000 ≥ 9000	59.9 61.1	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9	74.2 75.9
≥ 8000 ≥ 7000	63.2 64.5	78.4 79.9	78.4 79.9	78.4 79.9	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0	78.5 80.0
≥ 6000 ≥ 5000	66.6 69.0	82.9 86.0	82.9 86.0	82.9 86.0	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1	83.0 86.1
≥ 4500 ≥ 4000	69.4 70.4	86.9 88.6	86.9 88.7	86.9 88.7	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8	87.0 88.8
≥ 3500 ≥ 3000	70.6 71.3	89.2 90.9	89.5 91.2	89.5 91.2	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3	89.6 91.3
≥ 2500 ≥ 2000	72.0 72.5	92.0 92.6	92.5 93.1	92.5 93.1	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3	92.6 93.3
≥ 1800 ≥ 1500	73.0 73.8	93.5 94.8	94.2 95.5	94.2 95.7	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0	94.4 96.0
≥ 1200 ≥ 1000	74.2 74.3	95.8 96.0	96.8 97.3	97.2 97.7	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2	97.6 98.2
≥ 900 ≥ 800	74.4 74.4	96.3 96.5	97.6 97.7	98.1 98.2	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6	98.5 98.6
≥ 700 ≥ 600	74.4 74.5	96.5 96.6	97.7 98.2	98.2 98.6	98.6 99.0	98.6 99.0	98.6 99.0	98.7 99.1	98.7 99.1	98.7 99.1	98.7 99.1	98.7 99.1	98.7 99.1	98.7 99.1	98.7 99.1	98.7 99.1
≥ 500 ≥ 400	74.5 74.5	96.9 96.9	98.8 98.9	99.2 99.4	99.7 99.8	99.7 99.8	99.7 99.8	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9
≥ 300 ≥ 200	74.5 74.5	96.9 96.9	99.0 99.0	99.5 99.5	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 ≥ 0	74.5 74.5	96.9 96.9	99.0 99.0	99.5 99.5	99.9 99.9	99.9 99.9	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 STATION: MALMSTROM AFB MT/GREAT FALLS 68-77 YEARS MAY MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL HOURS

CEILING, FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 1/8	≥ 1/16	≤ 0
NO CEILING	46.8	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 20000	55.1	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2
≥ 18000	55.3	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4	59.4
≥ 16000	55.5	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 14000	55.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
≥ 12000	59.4	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
≥ 10000	65.8	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
≥ 9000	67.0	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
≥ 8000	69.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
≥ 7000	70.8	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 6000	73.4	78.7	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 5000	77.0	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9
≥ 4500	77.9	84.1	84.1	84.1	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2
≥ 4000	80.0	86.4	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 3500	81.1	87.7	87.9	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 3000	82.3	89.3	89.5	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 2500	83.3	90.5	90.8	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2000	84.5	91.9	92.3	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 1800	84.7	92.4	92.9	93.0	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1500	85.4	93.5	94.2	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 1200	86.2	94.7	95.5	95.8	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 1000	86.5	95.3	96.3	96.6	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 900	86.6	95.6	96.5	96.8	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 800	86.8	95.8	96.8	97.1	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 700	86.9	96.1	97.2	97.5	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 600	87.2	96.5	97.7	98.1	98.5	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 500	87.3	96.7	98.1	98.4	98.9	99.1	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	87.3	96.7	98.1	98.5	99.0	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	87.3	96.8	98.3	98.6	99.2	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8
≥ 200	87.4	96.8	98.4	98.8	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0
≥ 100	87.4	96.8	98.4	98.8	99.4	99.7	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	87.4	96.8	98.4	98.8	99.4	99.7	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

CR-77

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0200
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .1	≥ .05	≥ .01	≥ 0	≥ 0
NO CEILING	49.9	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 20000	55.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 18000	55.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 16000	55.7	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 14000	56.2	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
≥ 12000	60.0	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
≥ 10000	66.0	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 9000	66.7	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 8000	67.8	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 7000	69.3	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
≥ 6000	70.7	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 5000	72.3	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 4500	73.1	90.4	90.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 4000	74.7	92.1	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
≥ 3500	75.3	92.9	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 3000	75.6	93.3	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 2500	75.6	93.7	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 2000	75.7	94.2	94.4	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 1800	76.4	95.0	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1500	76.6	95.1	95.3	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 1200	76.8	95.4	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 1000	77.2	95.9	96.1	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 900	77.2	96.0	96.2	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 800	77.3	96.4	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 700	77.3	96.4	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 600	77.3	96.9	97.4	97.4	97.6	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 500	77.3	97.4	98.2	98.2	98.4	98.4	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 400	77.3	97.7	98.4	98.4	98.7	98.7	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 300	77.6	98.4	99.2	99.2	99.4	99.4	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	77.6	98.4	99.2	99.2	99.4	99.4	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	77.6	98.4	99.2	99.2	99.4	99.4	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	77.6	98.4	99.2	99.2	99.4	99.4	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

11-11

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING, FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	≥5/16	≥0
NO CEILING, ≥ 20000	50.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.9
≥ 18000	56.8	61.9	61.9	61.9	61.9	61.9	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.1
≥ 16000	56.8	61.9	61.9	61.9	61.9	61.9	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.1
≥ 14000	57.3	62.4	62.4	62.4	62.4	62.4	62.4	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.7
≥ 12000	61.9	67.1	67.1	67.1	67.1	67.1	67.1	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.3
≥ 10000	69.6	75.6	75.6	75.6	75.6	75.6	75.6	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.8
≥ 9000	70.4	76.4	76.4	76.4	76.4	76.4	76.4	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.7
≥ 8000	74.0	80.4	80.4	80.4	80.4	80.4	80.4	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.7
≥ 7000	75.2	82.2	82.2	82.2	82.2	82.2	82.2	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.4
≥ 6000	77.2	84.9	84.9	84.9	84.9	84.9	84.9	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.1
≥ 5000	79.0	86.7	86.7	86.7	86.7	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.9
≥ 4500	80.4	88.6	88.6	88.6	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.8
≥ 4000	82.0	90.2	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.4
≥ 3500	82.9	91.1	91.1	91.1	91.1	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.3
≥ 3000	83.7	92.0	92.0	92.0	92.0	92.0	92.0	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.1	92.2
≥ 2500	84.2	92.7	92.7	92.7	92.7	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.9
≥ 2000	84.4	93.1	93.2	93.2	93.2	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.4
≥ 1800	84.6	93.3	93.4	93.4	93.4	93.4	93.4	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.7
≥ 1500	85.0	94.1	94.2	94.2	94.2	94.2	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.4
≥ 1200	85.0	94.6	94.7	94.7	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.9
≥ 1000	85.1	94.9	95.0	95.0	95.0	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.2
≥ 900	85.2	95.1	95.2	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.4
≥ 800	85.3	95.7	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.0
≥ 700	85.6	96.1	96.3	96.3	96.3	96.3	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.7
≥ 600	85.8	96.8	97.0	97.0	97.0	97.0	97.1	97.3	97.3	97.3	97.3	97.4	97.4	97.4	97.4	97.6
≥ 500	85.8	97.1	97.3	97.3	97.3	97.3	97.7	97.9	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.1
≥ 400	85.9	97.2	97.4	97.4	97.6	97.6	98.0	98.2	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.4
≥ 300	86.2	98.1	98.3	98.3	98.4	98.4	98.9	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.3	99.4
≥ 200	86.2	98.1	98.3	98.3	98.6	98.6	99.1	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.8	99.9
≥ 100	86.2	98.1	98.3	98.3	98.6	98.6	99.1	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.8	100.0
≥ 0	86.2	98.1	98.3	98.3	98.6	98.6	99.1	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MARMSTRON AFB MT/GREAT FALLS 68-77 JUN
STATION NAME YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS TST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING	50.9	51.1	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2
≥ 20000	60.4	60.8	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	61.0
≥ 18000	60.6	60.9	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.1
≥ 16000	60.6	60.9	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.1
≥ 14000	61.0	61.3	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.6
≥ 12000	65.4	65.8	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	66.0
≥ 10000	71.7	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.4
≥ 9000	74.2	74.9	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.1
≥ 8000	77.8	78.6	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.8
≥ 7000	79.0	79.8	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	80.0
≥ 6000	81.6	82.6	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.8
≥ 5000	84.1	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.6
≥ 4500	85.1	86.4	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.7
≥ 4000	87.6	89.4	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.9
≥ 3500	88.9	90.8	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.2
≥ 3000	88.9	90.9	91.2	91.2	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.4
≥ 2500	89.7	91.7	92.1	92.1	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.4
≥ 2000	90.1	92.2	92.7	92.7	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	93.0
≥ 1800	90.2	92.3	92.8	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.1
≥ 1500	90.4	92.8	93.4	93.4	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.8
≥ 1200	90.8	93.7	94.6	94.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.9
≥ 1000	90.9	94.0	95.1	95.1	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.6
≥ 900	90.9	94.1	95.2	95.2	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.7
≥ 800	90.9	94.4	95.6	95.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.1
≥ 700	91.0	94.7	96.0	96.3	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.8
≥ 600	91.3	95.2	96.7	97.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.6
≥ 500	91.4	95.3	96.8	97.2	97.7	97.7	97.8	97.8	97.8	98.0	98.1	98.1	98.1	98.1	98.1	98.2
≥ 400	91.7	95.6	97.0	97.6	98.0	98.0	98.1	98.1	98.1	98.3	98.4	98.4	98.4	98.4	98.4	98.6
≥ 300	91.9	95.9	97.4	98.1	98.7	98.7	98.9	98.9	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.4
≥ 200	91.9	96.0	97.6	98.2	98.8	98.8	99.1	99.1	99.2	99.4	99.6	99.6	99.6	99.6	99.6	99.7
≥ 100	91.9	96.0	97.6	98.2	98.8	98.8	99.1	99.1	99.2	99.4	99.6	99.6	99.6	99.6	99.6	99.7
≥ 0	91.9	96.0	97.6	98.2	98.8	98.8	99.1	99.1	99.2	99.4	99.6	99.6	99.6	99.6	99.6	99.7

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 STATION MALMSTRON AFB MT/GREAT FALLS 68-77 YEARS JUN MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100 HOURS CST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING ≥ 20000	54.7	54.8	54.8	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
≥ 18000	63.6	63.9	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
≥ 16000	63.8	64.1	64.1	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
≥ 14000	64.0	64.3	64.3	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
≥ 12000	65.1	65.4	65.4	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
≥ 10000	68.7	69.0	69.0	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1
≥ 9000	74.3	74.8	74.8	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
≥ 8000	75.0	75.4	75.4	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
≥ 7000	77.2	77.7	77.7	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
≥ 6000	77.8	78.2	78.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
≥ 5000	79.9	80.4	80.4	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 4500	83.0	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
≥ 4000	84.3	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 3500	87.6	88.8	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 3000	89.6	91.1	91.2	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 2500	90.2	91.8	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 2000	91.1	92.9	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 1800	91.2	93.0	93.1	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1600	91.3	93.2	93.3	93.4	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 1400	92.0	94.6	94.7	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 1200	92.4	95.4	95.9	96.0	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 1000	93.0	96.0	96.6	96.7	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 900	93.0	96.1	96.8	97.0	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 800	93.3	96.7	97.3	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 700	93.6	97.1	97.8	98.1	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 600	93.7	97.6	98.2	98.6	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 500	93.7	97.6	98.2	98.6	98.9	99.0	99.0	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 400	93.7	97.7	98.3	98.9	99.2	99.3	99.3	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	93.7	97.7	98.3	98.9	99.2	99.3	99.3	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	93.7	97.7	98.3	98.9	99.2	99.3	99.3	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	93.7	97.7	98.3	98.9	99.2	99.3	99.3	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	93.7	97.7	98.3	98.9	99.2	99.3	99.3	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

STATION NAME

68-77
YEARS

JUN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4
≥ 20000	60.7	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 18000	61.2	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
≥ 16000	61.4	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
≥ 14000	62.8	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
≥ 12000	66.0	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
≥ 10000	70.1	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
≥ 9000	71.1	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
≥ 8000	74.1	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
≥ 7000	75.3	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
≥ 6000	79.6	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 5000	83.8	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
≥ 4500	85.4	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 4000	89.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 3500	91.4	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 3000	92.2	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 2500	93.3	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 2000	94.6	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1800	94.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 1500	95.4	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1200	95.9	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1000	96.0	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 900	96.0	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 800	96.0	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 700	96.0	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	96.0	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	96.1	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	96.1	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	96.1	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	96.1	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	96.1	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	96.1	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS

68-77

YEARS

JUN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/4	≥ 0
NO CEILING	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
≥ 20000	55.3	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
≥ 18000	55.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000	56.2	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6
≥ 14000	58.2	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
≥ 12000	63.1	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
≥ 10000	67.6	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
≥ 9000	68.3	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
≥ 8000	72.1	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 7000	74.6	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 6000	79.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 5000	86.6	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 4500	87.3	88.2	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 4000	91.7	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 3500	92.6	93.7	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 3000	93.6	94.7	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 2500	95.3	96.6	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 2000	96.0	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 1800	96.1	97.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1500	96.4	98.2	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1200	97.0	99.2	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1000	97.0	99.2	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	97.0	99.2	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 800	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	97.0	99.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≤ 1	≤ 0
NO CEILING ≥ 20000	42.8 56.4	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8	43.1 56.8
≥ 18000 ≥ 16000	56.8 56.9	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2	57.1 57.2
≥ 14000 ≥ 12000	58.1 62.4	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8	58.4 62.8
≥ 10000 ≥ 9000	69.2 70.9	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2	69.6 71.2
≥ 8000 ≥ 7000	74.8 78.3	75.1 78.7	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8	75.1 78.8
≥ 6000 ≥ 5000	83.7 88.2	84.0 88.8	84.1 88.9	84.1 89.0	84.2 89.3	84.2 89.3	84.2 89.3	84.2 89.4	84.2 89.6	84.2 89.6	84.2 89.6	84.2 89.6	84.2 89.6	84.2 89.6	84.2 89.6	84.2 89.6
≥ 4500 ≥ 4000	90.3 91.4	91.1 92.7	91.3 92.9	91.4 93.0	91.8 93.3	91.8 93.3	91.8 93.3	91.9 93.4	92.0 93.6	92.0 93.6	92.0 93.6	92.0 93.6	92.0 93.6	92.0 93.6	92.0 93.6	92.0 93.6
≥ 3500 ≥ 3000	92.4 93.1	93.8 94.6	94.2 95.0	94.3 95.1	94.7 95.4	94.7 95.4	94.7 95.4	94.8 95.6	94.9 95.7	94.9 95.7	94.9 95.7	94.9 95.7	94.9 95.7	94.9 95.7	94.9 95.7	94.9 95.7
≥ 2500 ≥ 2000	94.0 94.6	95.6 96.3	96.0 96.8	96.1 96.9	96.6 97.3	96.6 97.3	96.6 97.3	96.7 97.4	96.8 97.6	96.8 97.6	96.8 97.6	96.8 97.6	96.8 97.6	96.8 97.6	96.8 97.6	96.8 97.6
≥ 1800 ≥ 1500	94.7 94.7	96.4 96.4	96.9 96.9	97.0 97.0	97.4 97.6	97.4 97.6	97.4 97.6	97.6 97.7	97.7 97.8	97.7 97.8	97.7 97.8	97.7 97.8	97.7 97.8	97.7 97.8	97.7 97.8	97.7 97.8
≥ 1200 ≥ 1000	94.9 94.9	97.0 97.0	97.4 97.9	97.8 98.2	98.4 98.9	98.4 98.9	98.4 98.9	98.6 99.1	98.7 99.2	98.7 99.2	98.7 99.2	98.7 99.2	98.7 99.2	98.7 99.2	98.7 99.2	98.7 99.2
≥ 900 ≥ 800	94.9 94.9	97.0 97.0	97.9 97.9	98.3 98.3	99.0 99.0	99.0 99.0	99.0 99.0	99.2 99.2	99.3 99.3	99.3 99.3	99.3 99.3	99.3 99.3	99.3 99.3	99.3 99.3	99.3 99.3	99.3 99.3
≥ 700 ≥ 600	94.9 94.9	97.1 97.1	98.0 98.0	98.4 98.4	99.1 99.1	99.1 99.1	99.1 99.1	99.3 99.3	99.4 99.4	99.4 99.4	99.4 99.4	99.4 99.4	99.4 99.4	99.4 99.4	99.4 99.4	99.4 99.4
≥ 500 ≥ 400	94.9 94.9	97.1 97.1	98.2 98.2	98.7 98.7	99.3 99.3	99.4 99.4	99.4 99.4	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
≥ 300 ≥ 200	94.9 94.9	97.1 97.1	98.2 98.2	98.7 98.7	99.3 99.3	99.4 99.4	99.4 99.4	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8
≥ 100 0	94.9 94.9	97.1 97.1	98.2 98.2	98.7 98.7	99.3 99.3	99.4 99.4	99.4 99.4	99.7 99.7	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8	99.8 99.8

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 - MALMSTRUM AFB MT/GREAT FALLS

68-77

JUN

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	≥5/16	≥4
NO CEILING ≥ 20000	46.2 54.3	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9	52.3 61.9
≥ 18000 ≥ 16000	54.3 54.4	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0	61.9 62.0
≥ 14000 ≥ 12000	54.9 59.6	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7	62.6 67.7
≥ 10000 ≥ 9000	65.3 66.4	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9	75.1 76.9
≥ 8000 ≥ 7000	69.1 70.3	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0	79.8 82.0
≥ 6000 ≥ 5000	73.2 75.2	85.9 89.1	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2	85.9 89.2
≥ 4500 ≥ 4000	76.6 77.9	91.1 93.2	91.2 93.4	91.2 93.4	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6	91.2 93.6
≥ 3500 ≥ 3000	78.6 78.8	94.0 94.8	94.2 95.1	94.2 95.1	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2	94.3 95.2
≥ 2500 ≥ 2000	79.2 79.6	95.4 96.0	95.8 96.3	95.8 96.3	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6	95.9 96.6
≥ 1800 ≥ 1500	79.6 79.7	96.0 96.1	96.3 96.6	96.3 96.6	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9	96.6 96.9
≥ 1200 ≥ 1000	79.9 80.0	96.8 97.1	97.2 97.7	97.2 97.7	97.6 98.0	97.6 98.0	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1	97.6 98.1
≥ 900 ≥ 800	80.1 80.1	97.2 97.2	97.8 97.8	97.8 97.8	98.1 98.1	98.1 98.1	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2	98.2 98.2
≥ 700 ≥ 600	80.3 80.3	97.7 97.7	98.4 98.4	98.4 98.4	98.8 98.8	98.8 98.8	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9	98.9 98.9
≥ 500 ≥ 400	80.3 80.3	97.9 98.0	98.8 98.9	98.8 98.9	99.1 99.3	99.2 99.4	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7	99.4 99.7
≥ 300 ≥ 200	80.3 80.3	98.2 98.2	99.1 99.1	99.1 99.1	99.6 99.6	99.7 99.7	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 100 ≥ 0	80.3 80.3	98.2 98.2	99.1 99.1	99.1 99.1	99.6 99.6	99.7 99.7	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC FORM 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
PERIODS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	48.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 20000	57.9	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
≥ 18000	58.1	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
≥ 16000	58.3	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5
≥ 14000	59.2	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
≥ 12000	63.4	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
≥ 10000	69.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
≥ 9000	70.4	74.4	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
≥ 8000	73.4	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
≥ 7000	75.0	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
≥ 6000	78.1	83.1	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 5000	81.5	86.8	86.9	86.9	86.9	86.9	86.9	86.9	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
≥ 4500	82.8	88.4	88.5	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 4000	85.3	91.2	91.4	91.4	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 3500	86.5	92.5	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 3000	87.0	93.2	93.4	93.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 2500	87.8	94.2	94.4	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 2000	88.3	94.9	95.1	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1800	88.5	95.2	95.4	95.4	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 1500	88.8	95.7	96.0	96.0	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 1200	89.1	96.4	96.8	96.9	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 1000	89.3	96.7	97.2	97.3	97.5	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 900	89.3	96.8	97.3	97.4	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 800	89.4	97.0	97.6	97.7	97.9	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	89.5	97.3	97.9	98.1	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 600	89.5	97.5	98.2	98.3	98.6	98.6	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 500	89.6	97.7	98.4	98.6	98.8	98.9	99.0	99.1	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.2
≥ 400	89.6	97.8	98.5	98.7	99.0	99.0	99.2	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	89.7	98.1	98.8	99.0	99.3	99.4	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	89.7	98.1	98.8	99.0	99.4	99.4	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	89.7	98.1	98.8	99.0	99.4	99.4	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	89.7	98.1	98.8	99.0	99.4	99.4	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

7200

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTRUM AFB MT/GREAT FALLS

68-77

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≤ 0
NO CEILING, ≥ 20000	61.4 66.0	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5	75.5 82.5
≥ 18000 ≥ 16000	66.0 66.0	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5	82.5 82.5
≥ 14000 ≥ 12000	66.1 69.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2	82.8 86.2
≥ 10000 ≥ 9000	74.0 74.4	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0	92.5 93.0
≥ 8000 ≥ 7000	75.4 75.9	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1	94.3 95.1
≥ 6000 ≥ 5000	76.6 77.1	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6	95.8 96.6
≥ 4500 ≥ 4000	77.3 78.0	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7	97.1 97.7
≥ 3500 ≥ 3000	78.2 78.6	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5	98.0 98.5
≥ 2500 ≥ 2000	78.8 78.8	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9	98.7 98.9
≥ 1800 ≥ 1500	78.8 78.8	98.9 98.9	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2	98.9 99.2
≥ 1200 ≥ 1000	78.8 78.8	98.9 99.0	99.2 99.4	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5	99.2 99.5
≥ 900 ≥ 800	78.8 78.9	99.0 99.4	99.4 99.7	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8	99.5 99.8
≥ 700 ≥ 600	78.9 79.0	99.4 99.5	99.7 99.8	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9	99.8 99.9
≥ 500 ≥ 400	79.0 79.0	99.5 99.5	99.8 99.8	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9	99.9 99.9
≥ 300 ≥ 200	79.1 79.1	99.6 99.6	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 ≥ 0	79.1 79.1	99.6 99.6	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0300-0500
HOURS U.S.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≤ 10	≤ 4	≤ 0
NO CEILING	62.9	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.9	70.9	70.9	70.9	70.9
≥ 20000	70.5	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.9	79.9	79.9	79.9	79.9
≥ 18000	70.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.1	80.1	80.1	80.1	80.1
≥ 16000	70.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.1	80.1	80.1	80.1	80.1
≥ 14000	71.2	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.8	80.8	80.8	80.8	80.8
≥ 12000	75.3	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	85.1	85.1	85.1	85.1	85.1
≥ 10000	80.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.5	90.5
≥ 9000	80.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.6	90.6	90.6	90.6	90.6
≥ 8000	81.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	92.0	92.0	92.0	92.0	92.0
≥ 7000	82.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9
≥ 6000	83.5	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	94.0	94.0	94.0	94.0	94.0
≥ 5000	84.7	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.6	95.6	95.6	95.6	95.6
≥ 4500	85.1	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.1
≥ 4000	85.9	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.3	97.3	97.3	97.3	97.3
≥ 3500	86.1	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5
≥ 3000	86.2	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6
≥ 2500	86.2	97.4	97.5	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7
≥ 2000	86.5	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4
≥ 1800	86.6	98.2	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.5	98.5	98.5	98.5	98.5
≥ 1500	87.1	98.7	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0
≥ 1200	87.2	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1
≥ 1000	87.2	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1
≥ 900	87.2	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1
≥ 800	87.4	99.0	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5
≥ 700	87.4	99.0	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5
≥ 600	87.4	99.2	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7
≥ 500	87.4	99.2	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
≥ 400	87.4	99.2	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
≥ 300	87.4	99.5	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0
≥ 200	87.4	99.5	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0
≥ 100	87.4	99.5	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0
≥ 0	87.4	99.5	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2	≥1 1/2	≥1 1/4	≥1 1/8	≥1	≥3/4	≥1/2	≥1/4	≥1/8	≥5/16	≥1/4
NO CEILING	69.2	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
≥ 20000	75.8	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 18000	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 16000	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 14000	77.0	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
≥ 12000	82.4	82.5	82.6	82.6	82.6	82.6	82.6	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
≥ 10000	87.0	87.1	87.2	87.2	87.2	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 9000	88.1	88.2	88.3	88.3	88.3	88.3	88.3	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 8000	89.7	89.9	90.0	90.0	90.0	90.0	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 7000	90.6	90.9	91.0	91.0	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 6000	92.2	92.6	92.7	92.7	92.7	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 5000	93.3	93.8	93.9	93.9	93.9	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 4500	93.5	94.1	94.2	94.2	94.2	94.2	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 4000	94.5	95.2	95.3	95.3	95.3	95.3	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 3500	94.8	95.5	95.6	95.6	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 3000	94.9	95.6	95.7	95.7	95.7	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 2500	95.1	95.7	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 2000	95.6	96.5	96.6	96.7	96.8	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 1800	95.7	96.6	96.7	96.8	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 1500	96.8	97.8	98.0	98.1	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1200	97.0	98.4	98.5	98.7	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 1000	97.3	98.7	98.8	99.0	99.2	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900	97.3	98.8	98.9	99.1	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 800	97.3	98.8	98.9	99.1	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700	97.3	98.8	98.9	99.1	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600	97.3	98.8	98.9	99.1	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500	97.3	98.8	98.9	99.2	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 400	97.3	98.8	98.9	99.2	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300	97.3	98.8	98.9	99.4	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	97.3	98.8	98.9	99.4	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	97.3	98.8	98.9	99.4	99.7	99.8	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ U	97.3	98.8	98.9	99.4	99.7	99.8	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM 44

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS T.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 8	≥ 6	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .25	≥ .1	≥ .05	≥ .01	> .01	> 0
NO CEILING	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
≥ 20000	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 18000	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
≥ 16000	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
≥ 14000	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
≥ 12000	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.5
≥ 10000	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 9000	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 8000	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
≥ 7000	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 6000	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 5000	92.7	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 4500	93.4	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 4000	94.9	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 3500	95.4	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 3000	95.7	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 2500	96.3	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 2000	97.2	97.8	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1800	97.3	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1500	98.3	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1200	98.5	99.2	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1000	98.7	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	98.7	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	98.8	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700	98.8	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 600	98.8	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 500	98.8	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400	98.8	99.7	99.7	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0
≥ 300	98.8	99.7	99.7	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0
≥ 200	98.8	99.7	99.7	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0
≥ 100	98.8	99.7	99.7	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0
≥ 0	98.8	99.7	99.7	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 9	≥ 8	≥ 7	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1	≥ 1/2	≥ 1/4	≥ 1/8	≥ 5-16	≥ 1/2	≥ 0
NO CEILING	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
≥ 20000	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
≥ 18000	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 16000	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 14000	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 12000	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 10000	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 9000	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
≥ 8000	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 7000	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 6000	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 5000	93.8	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 4500	94.5	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 4000	96.8	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 3500	97.8	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 3000	98.1	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 2500	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 2000	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1800	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1500	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1200	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 1000	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 900	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 800	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 700	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	99.6	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM 1-64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ .	≥ 0
NO CEILING	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
≥ 20000	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 18000	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
≥ 16000	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
≥ 14000	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
≥ 12000	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 10000	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 9000	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 8000	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
≥ 7000	90.5	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 6000	92.6	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 5000	95.4	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 4500	95.8	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 4000	97.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 3500	98.1	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 3000	98.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2500	98.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 2000	98.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 1800	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1500	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1200	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 1000	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 900	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 700	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 600	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	98.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5-16	≥¼	≥0
NO CEILING	64.2	64.2	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 20000	72.9	72.9	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 18000	73.4	73.4	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
≥ 16000	73.5	73.5	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
≥ 14000	74.3	74.3	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
≥ 12000	79.9	79.9	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
≥ 10000	86.9	87.2	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 9000	88.2	88.5	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 8000	91.2	91.5	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 7000	92.0	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 6000	93.7	94.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 5500	96.2	96.6	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 4500	96.5	96.8	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 4000	98.0	98.4	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 3500	98.1	98.5	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 3000	98.1	98.5	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 2500	98.2	98.6	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 2000	98.3	98.7	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 1800	98.3	98.8	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1500	98.3	98.9	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1200	98.3	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1000	98.3	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 900	98.3	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 800	98.3	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700	98.3	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600	98.3	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500	98.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	98.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	98.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	98.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	98.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	98.5	99.1	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM 10-64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS T.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	58.2	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
≥ 20000	64.3	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
≥ 18000	64.4	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
≥ 16000	64.5	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 14000	65.3	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
≥ 12000	67.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
IV 10000	73.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
IV 9000	74.1	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
IV 8000	76.7	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
IV 7000	77.8	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
IV 6000	79.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
IV 5000	80.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
IV 4500	80.8	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
IV 4000	81.9	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
IV 3500	82.2	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 3000	82.4	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
IV 2500	82.5	98.4	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 2000	82.8	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 1800	82.8	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 1500	82.8	98.7	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 1200	82.8	98.7	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 1000	82.9	98.9	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 900	82.9	98.9	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 800	82.9	99.1	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 700	82.9	99.1	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 600	83.0	99.4	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 500	83.0	99.4	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 400	83.0	99.4	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 300	83.0	99.4	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 200	83.0	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	83.0	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	83.0	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

JUL

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

HOURLY

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ½	≥ 5/16	≥ ¼	≥ 0
NO CEILING	65.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.6	69.6	69.6	69.6	69.6
≥ 20000	72.9	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
≥ 18000	73.1	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
IV 16000	73.1	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
IV 14000	73.7	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.7	78.7	78.7	78.7
IV 12000	77.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
IV 10000	82.8	88.1	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
IV 9000	83.5	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
IV 8000	85.5	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.1	91.1	91.1	91.1	91.1	91.1
IV 7000	86.3	91.9	91.9	91.9	91.9	91.9	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
IV 6000	87.7	93.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
IV 5000	89.2	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
IV 4500	89.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
IV 4000	91.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
IV 3500	91.3	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
IV 3000	91.5	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
IV 2500	91.7	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2
IV 2000	92.1	98.5	98.6	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
IV 1800	92.2	98.6	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 1500	92.5	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3
IV 1200	92.6	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 1000	92.7	99.2	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6
IV 900	92.7	99.2	99.4	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 800	92.7	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 700	92.7	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
IV 600	92.8	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500	92.8	99.4	99.6	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 400	92.8	99.4	99.6	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 300	92.8	99.4	99.6	99.8	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	92.8	99.4	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	92.8	99.4	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	92.8	99.4	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

HALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

AUG
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥0
NO CEILING	59.5	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 20000	59.6	76.8	74.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	74.8	76.8	76.8	76.8	76.8	76.9
≥ 18000	59.6	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.9
≥ 16000	59.8	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.1
≥ 14000	60.8	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.1
≥ 12000	63.5	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.5
≥ 10000	66.8	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.5
≥ 9000	67.0	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.8
≥ 8000	68.7	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.1
≥ 7000	70.1	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.6
≥ 6000	70.6	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.6
≥ 5000	72.9	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.2
≥ 4500	73.4	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.8
≥ 4000	74.8	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.2
≥ 3500	75.8	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.3
≥ 3000	76.0	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.7
≥ 2500	76.1	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.9
≥ 2000	76.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.4
≥ 1800	76.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.6
≥ 1500	76.6	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.1
≥ 1200	76.8	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.3
≥ 1000	77.0	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.7
≥ 900	77.0	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.7
≥ 800	77.0	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0
≥ 700	77.0	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.0
≥ 600	77.1	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1
≥ 500	77.1	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.1
≥ 400	77.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7
≥ 300	77.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.9
≥ 200	77.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.9
≥ 100	77.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.9
≥ 0	77.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	61.0	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.5	72.5	72.5	72.5	72.5	72.5
≥ 20000	65.3	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	78.0	78.0	78.0	78.0	78.0	78.0
≥ 18000	65.3	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	78.0	78.0	78.0	78.0	78.0	78.0
≥ 16000	65.6	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.3	78.3	78.3	78.3	78.3	78.3
≥ 14000	66.0	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.7	78.7	78.7	78.7	78.7	78.7
≥ 12000	68.9	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.4	82.4	82.4	82.4	82.4	82.4
≥ 10000	72.0	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.5	85.7	85.7	85.7	85.7	85.7	85.7
≥ 9000	72.5	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.3	86.3	86.3	86.3	86.3	86.3
≥ 8000	73.4	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.4	87.4	87.4	87.4	87.4	87.4
≥ 7000	74.4	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.5	88.5	88.5	88.5	88.5	88.5
≥ 6000	75.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.2	90.2	90.2	90.2	90.2	90.2
≥ 5000	78.0	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.6	92.6	92.6	92.6	92.6	92.6
≥ 4500	78.2	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.9	92.9	92.9	92.9	92.9	92.9
≥ 4000	79.2	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	94.0	94.0	94.0	94.0	94.0	94.0
≥ 3500	79.9	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.8	94.8	94.8	94.8	94.8	94.8
≥ 3000	80.4	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.5	95.5	95.5	95.5	95.5	95.5
≥ 2500	80.8	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.8	95.8	95.8	95.8	95.8	95.8
≥ 2000	81.7	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.2	97.2	97.2	97.2	97.2	97.2
≥ 1800	81.8	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.3	97.3	97.3	97.3	97.3	97.3
≥ 1500	81.8	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.5	97.5	97.5	97.5	97.5	97.5
≥ 1200	82.0	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1000	82.0	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	82.0	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.3	98.3	98.3	98.3	98.3	98.3
≥ 800	82.0	98.0	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.5	98.5	98.5	98.5	98.5	98.5
≥ 700	82.0	98.0	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.6	98.6	98.6	98.6	98.6	98.6
≥ 600	82.4	98.3	98.7	98.8	98.9	98.9	98.9	98.9	98.9	98.9	99.1	99.1	99.1	99.1	99.1	99.1
≥ 500	82.4	98.5	98.9	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.5	99.5	99.5	99.5	99.5	99.5
≥ 400	82.4	98.6	99.0	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6
≥ 300	82.4	98.6	99.0	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6
≥ 200	82.4	98.6	99.0	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	82.4	98.6	99.0	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	82.4	98.6	99.0	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTRUM AFB MT/GREAT FALLS

68-77

AUG

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS U.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING	67.1	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
≥ 20000	73.1	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.8
≥ 18000	73.2	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.9
≥ 16000	73.9	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.5
≥ 14000	74.9	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.6
≥ 12000	79.0	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.7
≥ 10000	83.0	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.7
≥ 9000	83.9	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.5
≥ 8000	85.5	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	86.1
≥ 7000	87.0	87.4	87.4	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.7
≥ 6000	88.3	88.9	88.9	88.9	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.4
≥ 5000	90.3	91.1	91.1	91.1	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.5
≥ 4500	91.1	91.8	91.8	91.8	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.3
≥ 4000	92.0	92.8	92.8	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.2
≥ 3500	92.7	93.4	93.4	93.5	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	94.0
≥ 3000	93.1	94.1	94.2	94.3	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.8
≥ 2500	93.7	94.6	94.7	94.8	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.4
≥ 2000	94.3	95.5	95.6	95.7	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.2
≥ 1800	94.3	95.5	95.8	95.9	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.5
≥ 1500	94.7	96.1	96.6	96.7	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.2
≥ 1200	95.5	96.9	97.3	97.4	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	98.0
≥ 1000	95.6	97.0	97.5	97.6	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.2
≥ 900	95.6	97.2	97.7	97.8	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.4
≥ 800	95.6	97.2	97.8	98.0	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.5
≥ 700	95.8	97.5	98.3	98.4	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.9
≥ 600	95.9	97.6	98.5	98.6	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.2
≥ 500	95.9	97.8	98.8	98.9	99.2	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.7
≥ 400	95.9	97.8	98.8	98.9	99.2	99.4	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.7
≥ 300	95.9	97.8	98.8	98.9	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100.0
≥ 200	95.9	97.8	98.8	98.9	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100.0
≥ 100	95.9	97.8	98.8	98.9	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100.0
≥ 0	95.9	97.8	98.8	98.9	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

STATION NAME

68-77

TAPS

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1900-1100
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING ≥ 20000	66.6 73.1	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3	66.8 73.3
≥ 18000 ≥ 16000	73.4 73.7	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9	73.7 73.9
≥ 14000 ≥ 12000	75.2 79.0	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2	75.4 79.2
≥ 10000 ≥ 9000	83.4 84.4	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6	83.7 84.6
≥ 8000 ≥ 7000	86.9 88.5	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7	87.1 88.7
≥ 6000 ≥ 5000	89.2 90.6	89.5 90.9	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0	89.5 91.0
≥ 4500 ≥ 4000	91.5 91.9	91.7 92.2	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3	91.8 92.3
≥ 3500 ≥ 3000	92.0 92.6	92.3 92.9	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0	92.4 93.0
≥ 2500 ≥ 2000	92.9 94.0	93.5 94.6	93.8 94.9	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1	93.8 95.1
≥ 1800 ≥ 1500	94.5 95.4	95.2 96.0	95.5 96.5	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6	95.6 96.6
≥ 1200 ≥ 1000	95.9 95.9	96.9 97.1	97.3 97.6	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8	97.5 97.8
≥ 900 ≥ 800	95.9 96.2	97.2 97.5	97.8 98.2	98.1 98.4	98.1 98.4	98.1 98.4	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5	98.2 98.5
≥ 700 ≥ 600	96.6 96.7	98.0 98.2	98.7 99.0	98.9 99.2	98.9 99.2	98.9 99.2	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4	99.0 99.4
≥ 500 ≥ 400	96.7 96.7	98.3 98.4	99.1 99.2	99.5 99.6	99.5 99.6	99.5 99.6	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7	99.6 99.7
≥ 300 ≥ 200	96.7 96.7	98.4 98.4	99.2 99.2	99.6 99.6	99.6 99.6	99.6 99.6	99.7 99.9	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0
≥ 100 ≥ 0	96.7 96.7	98.4 98.4	99.2 99.2	99.6 99.6	99.6 99.6	99.6 99.6	99.7 99.9	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0	99.7 100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

AUG

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	64.4	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 20000	72.2	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
≥ 18000	72.4	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
≥ 16000	72.8	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 14000	74.3	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
≥ 12000	78.7	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
≥ 10000	83.5	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 9000	84.1	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
≥ 8000	86.5	86.8	86.8	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9
≥ 7000	86.9	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 6000	88.4	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 5000	89.9	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 4500	91.3	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 4000	92.7	93.1	93.1	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 3500	93.1	93.5	93.5	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 3000	93.9	94.3	94.3	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 2500	94.7	95.2	95.2	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 2000	95.2	95.9	96.0	96.2	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 1800	95.2	95.9	96.0	96.2	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 1500	95.5	96.3	96.5	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 1200	95.7	97.0	97.2	97.5	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 1000	96.0	97.7	98.0	98.3	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 900	96.0	97.7	98.0	98.3	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 800	96.2	98.1	98.5	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 700	96.6	98.5	98.9	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600	96.6	98.5	98.9	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500	96.6	98.6	99.0	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 400	96.6	98.6	99.0	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300	96.6	98.7	99.1	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	96.6	98.7	99.1	99.5	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	96.6	98.7	99.1	99.5	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	96.6	98.7	99.1	99.5	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

AUG
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS CST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 20000	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
≥ 18000	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
≥ 16000	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
≥ 14000	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 12000	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
≥ 10000	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
≥ 9000	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 8000	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
≥ 7000	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
≥ 6000	89.1	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 5000	91.9	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 4500	93.3	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 4000	94.6	94.9	95.1	95.1	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 3500	95.4	95.7	95.8	95.8	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
≥ 3000	95.6	96.0	96.2	96.3	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 2500	96.2	96.9	97.1	97.2	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 2000	96.5	97.3	97.5	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 1800	96.6	97.4	97.6	97.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1500	96.8	97.7	98.0	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 1200	96.9	98.0	98.3	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1000	97.0	98.2	98.6	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 900	97.2	98.4	98.8	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 800	97.2	98.5	98.9	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 700	97.2	98.5	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600	97.2	98.5	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500	97.3	98.7	99.1	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	97.3	98.7	99.1	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300	97.3	98.7	99.1	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	97.3	98.7	99.1	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100	97.3	98.7	99.1	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0	97.3	98.7	99.1	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

AUG
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	61.0	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 20000	68.7	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.6
≥ 18000	69.0	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
≥ 16000	70.0	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
≥ 14000	71.0	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
≥ 12000	75.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 10000	81.0	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
≥ 9000	81.6	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 8000	83.3	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 7000	84.9	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
≥ 6000	89.7	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 5000	91.9	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 4500	92.2	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 4000	94.0	95.7	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 3500	94.7	96.5	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 3000	95.2	96.9	97.0	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 2500	95.6	97.3	97.4	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 2000	95.6	97.7	98.0	98.2	98.2	98.2	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1800	95.8	98.0	98.2	98.4	98.4	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1500	96.2	98.5	98.7	98.9	98.9	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 1200	96.3	98.6	98.8	99.0	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1000	96.5	98.7	98.9	99.1	99.1	99.2	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 900	96.5	98.7	98.9	99.1	99.1	99.2	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 800	96.5	98.7	98.9	99.1	99.1	99.2	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 700	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	96.5	98.7	98.9	99.4	99.5	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅔16	≥0
NO CEILING	51.3	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
≥ 2000	54.7	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
IV 18000	55.1	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
IV 16000	55.2	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
IV 14000	56.0	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
IV 12000	59.9	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
IV 10000	64.8	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
IV 9000	65.6	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
IV 8000	66.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
IV 7000	68.8	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
IV 6000	71.1	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
IV 5000	73.9	94.0	94.0	94.0	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
IV 4500	74.4	94.6	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
IV 4000	75.8	96.3	96.3	96.3	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
IV 3500	76.2	96.8	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
IV 3000	76.3	96.9	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
IV 2500	76.6	97.2	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
IV 2000	76.8	98.0	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
IV 1800	76.9	98.1	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
IV 1500	77.0	98.7	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 1200	77.2	99.0	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 1000	77.2	99.1	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 900	77.2	99.1	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 800	77.2	99.1	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 700	77.2	99.1	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 600	77.2	99.1	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 500	77.3	99.2	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400	77.3	99.2	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300	77.3	99.2	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200	77.3	99.2	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100	77.3	99.2	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0	77.3	99.2	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

AUG
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS (24)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	60.9	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
≥ 20000	67.0	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	73.0	73.0	73.0	73.0	73.0	73.0
IV 18000	67.2	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.2	73.2	73.2	73.2	73.2	73.2
IV 16000	67.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
IV 14000	68.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.7	74.7	74.7	74.7	74.7	74.7
IV 12000	72.7	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	79.0
IV 10000	77.1	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.6
IV 9000	77.7	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
IV 8000	79.5	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.2	86.2	86.2	86.2	86.2	86.2
IV 7000	80.8	87.5	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
IV 6000	82.8	89.8	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
IV 5000	84.9	92.2	92.2	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
IV 4500	85.7	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.1	93.1	93.1	93.1	93.1	93.1
IV 4000	86.9	94.2	94.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
IV 3500	87.5	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1
IV 3000	87.9	95.4	95.5	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7
IV 2500	88.3	95.9	96.0	96.1	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.3
IV 2000	88.8	96.7	96.8	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1
IV 1800	88.9	96.8	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.3
IV 1500	89.2	97.3	97.5	97.7	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
IV 1200	89.5	97.8	98.0	98.1	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
IV 1000	89.7	98.0	98.3	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.7
IV 900	89.7	98.1	98.4	98.5	98.6	98.7	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 800	89.7	98.2	98.6	98.8	98.8	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 700	89.9	98.4	98.8	99.0	99.1	99.2	99.2	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 600	89.9	98.5	99.0	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.5
IV 500	90.0	98.6	99.1	99.3	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.7
IV 400	90.0	98.7	99.2	99.4	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8
IV 300	90.0	98.7	99.2	99.4	99.6	99.7	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 200	90.0	98.7	99.2	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 100	90.0	98.7	99.2	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0
IV 0	90.0	98.7	99.2	99.4	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

SEP

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	52.9	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
≥ 18000	56.8	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
≥ 16000	56.9	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
≥ 14000	57.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 12000	60.7	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
≥ 10000	64.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6
≥ 9000	66.0	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
≥ 8000	68.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
≥ 7000	69.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 6000	70.8	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 5000	72.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
≥ 4500	73.3	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 4000	73.9	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 3500	74.4	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 3000	74.8	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
≥ 2500	75.4	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 2000	76.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 1800	76.4	95.4	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 1500	76.7	95.7	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 1200	77.0	96.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1000	77.8	97.2	97.4	97.4	97.6	97.6	97.7	97.7	97.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	77.8	97.2	97.4	97.4	97.6	97.6	97.8	97.8	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800	77.8	97.2	97.4	97.4	97.6	97.6	97.8	97.8	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700	77.8	97.2	97.6	97.6	97.7	97.7	97.9	97.9	97.9	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 600	77.8	97.2	97.7	97.7	97.8	97.8	98.1	98.4	98.4	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 500	77.8	97.2	97.7	97.7	97.9	98.1	98.4	98.8	98.8	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 400	77.8	97.3	97.8	97.8	98.0	98.2	98.8	99.1	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300	77.8	97.4	98.0	98.0	98.3	98.6	99.1	99.4	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	77.8	97.4	98.0	98.0	98.3	98.6	99.2	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	77.8	97.4	98.0	98.0	98.3	98.6	99.2	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	77.8	97.4	98.0	98.0	98.3	98.6	99.2	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTRUM AFB MT/GREAT FALLS

68-77

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	53.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
≥ 20000	57.4	72.1	72.1	72.2	72.3	72.3	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 18000	57.4	72.1	72.1	72.2	72.3	72.3	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 16000	57.6	72.2	72.2	72.3	72.4	72.4	72.4	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 14000	58.0	72.8	72.8	72.9	73.0	73.0	73.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 12000	61.6	76.9	76.9	77.0	77.1	77.1	77.1	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.3	77.3
≥ 10000	64.7	81.2	81.2	81.2	81.4	81.4	81.4	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.7	81.7
≥ 9000	65.2	82.1	82.1	82.2	82.3	82.3	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.6	82.6
≥ 8000	67.8	84.8	84.8	84.9	85.0	85.0	85.0	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.2	85.2
≥ 7000	68.7	85.9	85.9	86.0	86.1	86.1	86.1	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.3	86.3
≥ 6000	70.3	87.7	87.7	87.8	87.9	87.9	87.9	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.1	88.1
≥ 5000	72.2	89.9	89.9	90.0	90.2	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.4	90.4
≥ 4500	73.0	91.2	91.2	91.3	91.6	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.8	91.8
≥ 4000	75.1	92.8	92.8	92.9	93.1	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.3	93.3
≥ 3500	75.6	93.2	93.2	93.3	93.6	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.8	93.8
≥ 3000	75.6	93.6	93.6	93.7	93.9	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.1	94.1
≥ 2500	76.1	94.1	94.1	94.2	94.4	94.4	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.7	94.7
≥ 2000	77.2	95.3	95.3	95.4	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.0	96.0
≥ 1800	77.2	95.3	95.3	95.4	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.0	96.0
≥ 1500	77.4	95.7	95.7	95.8	96.1	96.1	96.1	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.4	96.4
≥ 1200	77.4	95.9	95.9	96.0	96.3	96.3	96.3	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.7	96.7
≥ 1000	77.7	96.3	96.4	96.6	96.9	96.9	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.2	97.2
≥ 900	77.9	96.6	96.7	96.8	97.2	97.2	97.2	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.6	97.6
≥ 800	77.9	96.6	96.7	96.8	97.2	97.2	97.2	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.6	97.6
≥ 700	77.9	96.6	97.1	97.2	97.7	97.7	97.7	97.8	98.0	98.1	98.2	98.2	98.2	98.2	98.3	98.3
≥ 600	77.9	96.7	97.2	97.3	97.8	97.8	97.8	97.9	98.1	98.2	98.3	98.3	98.3	98.3	98.4	98.4
≥ 500	77.9	96.7	97.4	97.6	98.0	98.1	98.2	98.6	98.8	99.0	99.0	99.0	99.0	99.0	99.1	99.1
≥ 400	77.9	96.7	97.6	97.8	98.2	98.3	98.4	98.8	99.1	99.2	99.2	99.2	99.2	99.2	99.3	99.3
≥ 300	77.9	96.7	97.6	97.8	98.6	98.7	98.8	99.1	99.4	99.7	99.7	99.7	99.7	99.7	99.9	99.9
≥ 200	77.9	96.7	97.6	97.8	98.6	98.7	98.8	99.1	99.4	99.7	99.7	99.7	99.7	99.7	99.9	99.9
≥ 100	77.9	96.7	97.6	97.8	98.6	98.7	98.8	99.1	99.4	99.7	99.7	99.7	99.7	99.7	99.9	99.9
≥ 0	77.9	96.7	97.6	97.8	98.6	98.7	98.8	99.1	99.4	99.7	99.7	99.7	99.7	99.7	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2 1/2	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1	≥ 3/4	≥ 1/2	≥ 1/4	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	58.2	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
≥ 20000	66.2	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4
≥ 18000	66.3	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
≥ 16000	66.6	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
≥ 14000	67.9	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
≥ 12000	72.3	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 10000	77.7	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
≥ 9000	78.8	79.0	79.0	79.0	79.0	79.0	79.0	79.1	79.1	79.1	79.1	79.1	79.1	79.2	79.2	79.2
≥ 8000	81.0	81.2	81.2	81.2	81.2	81.2	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.4	81.4	81.4
≥ 7000	82.9	83.1	83.1	83.1	83.1	83.1	83.1	83.2	83.2	83.2	83.2	83.2	83.2	83.3	83.3	83.3
≥ 6000	85.0	85.2	85.2	85.2	85.2	85.2	85.2	85.3	85.3	85.3	85.3	85.3	85.3	85.4	85.4	85.4
≥ 5000	86.7	87.1	87.1	87.1	87.1	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.3	87.3	87.3
≥ 4500	87.8	88.2	88.2	88.2	88.2	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.4	88.4	88.4
≥ 4000	89.1	89.9	90.0	90.0	90.0	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.3
≥ 3500	90.0	90.9	91.0	91.0	91.0	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.3	91.3	91.3
≥ 3000	90.4	91.6	91.7	91.7	91.7	91.8	91.8	91.9	91.9	91.9	91.9	91.9	91.9	92.0	92.0	92.0
≥ 2500	91.1	92.3	92.4	92.4	92.6	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	93.0	93.0	93.0
≥ 2000	92.1	94.0	94.1	94.1	94.3	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.8	94.8	94.8
≥ 1800	92.3	94.2	94.4	94.4	94.7	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.1	95.1	95.1
≥ 1500	92.4	94.3	94.6	94.6	94.8	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.2	95.2	95.2
≥ 1200	92.9	95.0	95.2	95.2	95.4	95.7	95.7	95.8	95.9	95.9	95.9	95.9	95.9	96.0	96.0	96.0
≥ 1000	93.1	95.2	95.4	95.6	95.8	96.0	96.0	96.1	96.3	96.3	96.3	96.3	96.3	96.4	96.4	96.4
≥ 900	93.3	95.4	95.7	95.8	96.1	96.3	96.3	96.4	96.7	96.7	96.7	96.7	96.7	96.8	96.8	96.8
≥ 800	93.6	95.8	96.0	96.1	96.4	96.7	96.8	97.0	97.2	97.2	97.2	97.2	97.2	97.3	97.3	97.3
≥ 700	93.6	96.2	96.4	96.6	97.0	97.2	97.3	97.6	97.8	97.8	97.9	98.0	98.1	98.1	98.1	98.1
≥ 600	93.7	96.3	96.6	96.7	97.1	97.3	97.6	97.9	98.1	98.1	98.2	98.3	98.4	98.4	98.4	98.4
≥ 500	93.8	96.7	96.9	97.0	97.4	97.7	97.9	98.3	98.6	98.6	98.7	98.8	98.9	98.9	98.9	98.9
≥ 400	93.8	96.7	96.9	97.0	97.6	97.8	98.0	98.4	98.7	98.7	98.8	98.9	99.0	99.0	99.0	99.0
≥ 300	93.8	96.7	96.9	97.1	97.8	98.0	98.2	98.9	99.1	99.3	99.4	99.6	99.8	99.8	99.8	99.9
≥ 200	93.8	96.7	96.9	97.1	97.8	98.0	98.2	98.9	99.1	99.3	99.4	99.6	99.9	99.9	99.9	100.0
≥ 100	93.8	96.7	96.9	97.1	97.8	98.0	98.2	98.9	99.1	99.3	99.4	99.6	99.9	99.9	99.9	100.0
≥ 0	93.8	96.7	96.9	97.1	97.8	98.0	98.2	98.9	99.1	99.3	99.4	99.6	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM 1-11-64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRON AFB MT/GREAT FALLS

68-77

YEARS

SEP

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 70000	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
≥ 18000	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 16000	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 14000	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
≥ 12000	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
≥ 10000	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
≥ 9000	80.6	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 8000	83.1	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
≥ 7000	84.7	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
≥ 6000	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3
≥ 5000	87.7	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8
≥ 4500	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
≥ 4000	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
≥ 3500	89.9	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
≥ 3000	90.3	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
≥ 2500	91.1	91.4	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 2000	91.9	92.8	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 1800	92.3	93.2	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 1500	93.6	94.9	95.3	95.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 1200	94.2	95.8	96.2	96.2	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1000	94.8	96.7	97.1	97.1	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 900	94.8	96.7	97.1	97.1	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 800	95.0	97.0	97.4	97.4	97.9	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 700	95.0	97.1	97.6	97.6	98.1	98.1	98.1	98.1	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 600	95.0	97.2	97.7	97.7	98.3	98.3	98.3	98.3	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 500	95.0	97.4	97.9	97.9	98.6	98.6	98.7	98.8	99.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400	95.0	97.4	98.0	98.0	98.7	98.7	98.9	99.0	99.2	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300	95.0	97.6	98.1	98.1	98.8	98.8	99.1	99.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200	95.0	97.6	98.1	98.1	98.8	98.8	99.1	99.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	95.0	97.6	98.1	98.1	98.8	98.8	99.1	99.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	95.0	97.6	98.1	98.1	98.8	98.8	99.1	99.2	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
Jul 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

STATION NAME
MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

SEP

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ⅓	≥ ⅓ 16	≥ ¼	≥ 0
NO CEILING	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0
≥ 20000	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
≥ 18000	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
≥ 16000	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7
≥ 14000	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
≥ 12000	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
≥ 10000	77.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 9000	78.2	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
≥ 8000	79.7	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 7000	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 6000	84.4	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 5000	86.2	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 4500	87.7	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9	87.9
≥ 4000	88.7	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
≥ 3500	90.0	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 3000	91.9	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 2500	92.8	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
≥ 2000	93.9	94.6	94.7	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 1800	94.0	94.7	94.8	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 1500	95.3	96.0	96.1	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
≥ 1200	96.0	96.8	97.0	97.2	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000	96.7	97.6	97.9	98.1	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 900	96.8	97.7	98.0	98.2	98.4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800	97.1	98.3	98.7	98.9	99.1	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700	97.1	98.3	98.8	99.0	99.3	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 600	97.1	98.3	98.8	99.0	99.3	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 500	97.1	98.3	98.8	99.0	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	97.1	98.3	98.8	99.0	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 300	97.1	98.3	98.8	99.0	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 200	97.1	98.3	98.8	99.0	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9	99.9	99.9
≥ 100	97.1	98.3	98.8	99.0	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0
≥ 0	97.1	98.3	98.8	99.0	99.4	99.7	99.7	99.7	99.7	99.8	99.8	99.9	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM 7-64

0-14-5 (OL A)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅔	≥0
NO CEILING	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 20000	64.8	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9
≥ 18000	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2
≥ 16000	65.2	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
≥ 14000	66.3	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4
≥ 12000	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 10000	76.7	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 9000	77.1	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
≥ 8000	79.2	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 7000	80.7	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
≥ 6000	84.3	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 5000	88.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 4500	89.8	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 4000	90.9	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 3500	91.9	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 3000	93.4	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 2500	95.3	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 2000	96.1	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 1800	96.4	97.3	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1500	97.0	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1200	97.4	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1000	97.4	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 900	97.9	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 800	98.0	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 700	98.0	99.0	99.0	99.2	99.3	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600	98.0	99.0	99.0	99.2	99.3	99.3	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 500	98.0	99.0	99.0	99.2	99.4	99.4	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400	98.0	99.0	99.0	99.2	99.4	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300	98.0	99.0	99.0	99.2	99.4	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200	98.0	99.0	99.0	99.2	99.4	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100	98.0	99.0	99.0	99.2	99.4	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 0	98.0	99.0	99.0	99.2	99.4	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING	56.1	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 20000	62.1	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
IV 18000	62.1	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
IV 16000	62.4	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
IV 14000	62.9	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
IV 12000	67.0	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
IV 10000	70.7	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
IV 9000	72.1	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9
IV 8000	74.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
IV 7000	75.6	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
IV 6000	78.4	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
IV 5000	81.8	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
IV 4500	83.4	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
IV 4000	84.3	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
IV 3500	85.3	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
IV 3000	85.9	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
IV 2500	87.1	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
IV 2000	88.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
IV 1800	88.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
IV 1500	89.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
IV 1200	89.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 1000	89.3	98.7	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 900	89.4	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 800	89.4	98.8	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 700	89.4	98.8	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 600	89.4	98.8	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 500	89.4	98.8	99.1	99.2	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 400	89.4	98.8	99.1	99.2	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 300	89.4	98.8	99.1	99.2	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8
IV 200	89.4	98.8	99.1	99.2	99.4	99.4	99.6	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
IV 100	89.4	98.8	99.1	99.2	99.4	99.4	99.6	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
IV 0	89.4	98.8	99.1	99.2	99.4	99.4	99.6	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS TST

CEILING FEET:	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	≥5/16	¾	≥0
NO CEILING	52.6	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
≥ 20000	56.8	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
≥ 18000	57.0	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
≥ 16000	57.2	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 14000	57.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 12000	60.1	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 10000	64.0	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
≥ 9000	65.2	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 8000	66.7	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
≥ 7000	67.2	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 6000	69.2	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8
≥ 5000	71.8	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 4500	73.0	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 4000	73.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 3500	74.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 3000	75.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 2500	75.8	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 2000	77.2	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1800	77.4	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 1500	77.7	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 1200	77.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 1000	78.2	98.4	98.6	98.6	98.6	98.6	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 900	78.2	98.4	98.6	98.6	98.6	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 800	78.2	98.4	98.8	98.8	98.8	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 700	78.2	98.4	98.8	98.8	98.8	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 600	78.2	98.4	98.8	98.8	98.8	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
≥ 500	78.2	98.7	99.1	99.1	99.1	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400	78.2	98.7	99.1	99.1	99.1	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 300	78.2	98.7	99.1	99.1	99.1	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200	78.2	98.7	99.1	99.2	99.3	99.3	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100	78.2	98.7	99.1	99.2	99.3	99.3	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0	78.2	98.7	99.1	99.2	99.3	99.3	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

900

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS (24)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	55.5	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
≥ 20000	62.2	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5
≥ 18000	62.4	68.7	68.7	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 16000	62.5	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
≥ 14000	63.3	69.7	69.7	69.7	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
≥ 12000	67.3	74.0	74.0	74.0	74.0	74.0	74.0	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
≥ 10000	71.9	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	79.3
≥ 9000	72.9	80.5	80.5	80.5	80.5	80.5	80.5	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 8000	75.0	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 7000	76.3	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2
≥ 6000	78.6	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 5000	80.9	88.9	88.9	88.9	88.9	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 4500	82.1	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
≥ 4000	83.1	91.3	91.3	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 3500	84.0	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 3000	84.6	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 2500	85.6	94.0	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 2000	86.6	95.3	95.4	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 1800	86.8	95.6	95.7	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
≥ 1500	87.4	96.3	96.4	96.5	96.6	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1200	87.8	96.8	97.0	97.0	97.2	97.2	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 1000	88.1	97.3	97.5	97.6	97.8	97.8	97.8	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900	88.3	97.4	97.6	97.7	97.9	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2
≥ 800	88.4	97.6	97.9	97.9	98.2	98.2	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.5	98.5	98.5
≥ 700	88.4	97.7	98.0	98.1	98.4	98.4	98.5	98.6	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8
≥ 600	88.4	97.8	98.1	98.2	98.5	98.5	98.6	98.8	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0
≥ 500	88.4	97.8	98.2	98.3	98.7	98.8	98.9	99.1	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.4
≥ 400	88.4	97.9	98.3	98.4	98.7	98.8	99.0	99.2	99.3	99.3	99.4	99.5	99.5	99.5	99.5	99.5
≥ 300	88.4	97.9	98.3	98.4	98.9	99.0	99.2	99.3	99.6	99.7	99.8	99.8	99.8	99.8	99.9	99.9
≥ 200	88.4	97.9	98.3	98.5	98.9	99.0	99.2	99.5	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0
≥ 100	88.4	97.9	98.3	98.5	98.9	99.0	99.2	99.5	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0
≥ 0	88.4	97.9	98.3	98.5	98.9	99.0	99.2	99.5	99.6	99.8	99.8	99.9	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

7200

USAF ETAC FORM 10-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS T S I

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	51.3	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.2	63.2	63.2	63.2	63.2	63.3
≥ 20000	58.0	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	72.0	72.0	72.0	72.0	72.0	72.2
IV 18000	58.0	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	72.0	72.0	72.0	72.0	72.0	72.2
IV 16000	58.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.3	72.3	72.3	72.3	72.3	72.4
IV 14000	58.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.6	72.6	72.6	72.6	72.6	72.7
IV 12000	62.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.3	76.3	76.3	76.3	76.3	76.5
IV 10000	66.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.3	81.3	81.3	81.3	81.3	81.4
IV 9000	66.5	81.4	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.6	81.6	81.6	81.6	81.6	81.7
IV 8000	67.0	82.2	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.4	82.4	82.4	82.4	82.4	82.5
IV 7000	67.5	83.2	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.4	83.4	83.4	83.4	83.4	83.5
IV 6000	69.4	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.7	85.7	85.7	85.7	85.7	85.8
IV 5000	69.9	86.3	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.7
IV 4500	70.5	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.7
IV 4000	71.0	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.4	88.4	88.4	88.4	88.4	88.5
IV 3500	71.1	88.5	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.8
IV 3000	71.4	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.4	89.4	89.4	89.4	89.4	89.5
IV 2500	71.8	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.5
IV 2000	72.5	91.3	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.9
IV 1800	72.5	91.3	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.9
IV 1500	72.7	91.9	92.7	92.7	92.7	92.8	92.9	92.9	92.9	92.9	93.0	93.0	93.0	93.0	93.0	93.1
IV 1200	72.7	92.8	93.5	93.7	93.8	93.9	94.0	94.0	94.0	94.0	94.1	94.1	94.1	94.1	94.1	94.2
IV 1000	72.7	93.2	94.0	94.2	94.3	94.4	94.5	94.5	94.5	94.5	94.6	94.6	94.6	94.6	94.6	94.7
IV 900	72.9	93.4	94.2	94.4	94.5	94.6	94.7	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.9
IV 800	72.9	93.4	94.3	94.5	94.6	94.7	94.8	94.8	94.8	94.8	94.9	94.9	94.9	94.9	94.9	95.0
IV 700	72.9	93.7	94.5	94.7	94.8	94.9	95.1	95.4	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.6
IV 600	72.9	94.0	94.8	95.2	95.4	95.6	95.7	96.1	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.3
IV 500	72.9	94.2	95.1	95.4	95.7	95.9	96.0	96.6	96.6	97.0	97.1	97.1	97.1	97.1	97.1	97.2
IV 400	72.9	94.3	95.2	95.5	95.9	96.1	96.5	97.1	97.2	97.7	97.8	97.8	97.8	97.8	97.8	98.0
IV 300	72.9	94.5	95.4	95.7	96.6	96.8	97.2	98.0	98.2	98.7	98.8	98.9	98.9	98.9	98.9	99.0
IV 200	72.9	94.5	95.6	95.9	96.9	97.1	97.5	98.3	98.5	99.0	99.1	99.2	99.2	99.2	99.2	99.4
IV 100	72.9	94.5	95.7	96.0	97.0	97.5	98.1	98.8	99.0	99.6	99.7	99.8	99.8	99.8	99.8	100.0
IV 0	72.9	94.5	95.7	96.0	97.0	97.5	98.1	98.8	99.0	99.6	99.7	99.8	99.8	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC FORM 7-64 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

OCT

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	51.6	61.2	61.2	61.2	61.2	61.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3
≥ 20000	57.7	71.6	71.6	71.6	71.6	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
≥ 18000	57.7	71.6	71.6	71.6	71.6	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
≥ 16000	57.7	71.6	71.6	71.6	71.6	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
≥ 14000	58.1	71.9	71.9	71.9	71.9	71.9	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
≥ 12000	61.0	74.9	74.9	74.9	74.9	74.9	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
≥ 10000	64.6	78.9	78.9	78.9	78.9	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
≥ 9000	65.1	79.4	79.4	79.4	79.4	79.4	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5
≥ 8000	65.6	80.4	80.4	80.4	80.4	80.4	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
≥ 7000	66.3	81.2	81.2	81.2	81.2	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
≥ 6000	68.3	83.5	83.5	83.5	83.5	83.5	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 5000	69.7	85.1	85.1	85.1	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 4500	70.2	86.2	86.2	86.2	86.2	86.2	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5	86.5
≥ 4000	71.2	88.2	88.2	88.2	88.2	88.2	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 3500	71.2	88.2	88.2	88.2	88.2	88.2	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
≥ 3000	71.5	88.9	88.9	88.9	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 2500	71.7	89.4	89.4	89.4	89.4	89.4	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 2000	71.8	89.5	89.5	89.5	89.5	89.5	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
≥ 1800	71.9	89.7	89.7	89.7	89.7	89.7	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
≥ 1500	72.5	90.8	90.8	90.8	90.8	90.8	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4	91.4
≥ 1200	73.0	91.7	91.7	91.7	91.7	91.7	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1000	73.0	92.3	92.3	92.3	92.3	92.3	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 900	73.2	92.7	92.7	92.7	92.7	92.7	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 800	73.3	92.8	92.8	92.8	92.8	92.8	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 700	73.3	93.1	93.1	93.1	93.1	93.1	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 600	73.5	93.7	93.7	93.7	93.7	93.7	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 500	73.5	93.7	93.7	93.7	93.7	93.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 400	73.5	93.9	93.9	93.9	93.9	93.9	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 300	73.5	93.9	93.9	93.9	93.9	93.9	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 200	73.5	93.9	93.9	93.9	93.9	93.9	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 100	73.5	93.9	93.9	93.9	93.9	93.9	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 0	73.5	93.9	93.9	93.9	93.9	93.9	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC FORM 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

OCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS (LST)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5 16	≥¼	≥0
NO CEILING	57.0	58.9	58.9	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.1	59.1	59.2
≥ 20000	62.8	66.0	66.0	66.1	66.2	66.2	66.2	66.2	66.2	66.3	66.3	66.3	66.3	66.5	66.5	66.6
≥ 18000	62.8	66.0	66.0	66.1	66.2	66.2	66.2	66.2	66.2	66.3	66.3	66.3	66.3	66.5	66.5	66.6
≥ 16000	62.9	66.1	66.1	66.2	66.3	66.3	66.3	66.3	66.3	66.5	66.5	66.5	66.5	66.6	66.6	66.7
≥ 14000	63.5	66.9	66.9	67.0	67.1	67.1	67.1	67.1	67.1	67.2	67.2	67.2	67.2	67.3	67.3	67.4
≥ 12000	67.7	71.3	71.3	71.4	71.5	71.5	71.5	71.5	71.5	71.7	71.7	71.7	71.7	71.8	71.8	71.9
≥ 10000	72.4	76.1	76.1	76.2	76.3	76.3	76.3	76.3	76.3	76.6	76.6	76.6	76.6	76.7	76.7	76.8
≥ 9000	73.0	76.8	76.8	76.9	77.0	77.0	77.0	77.0	77.0	77.2	77.2	77.2	77.2	77.3	77.3	77.4
≥ 8000	75.1	78.9	78.9	79.0	79.1	79.1	79.1	79.1	79.1	79.4	79.4	79.4	79.4	79.5	79.5	79.6
≥ 7000	76.7	80.5	80.5	80.6	80.8	80.8	80.8	80.8	80.8	81.0	81.0	81.0	81.0	81.1	81.1	81.2
≥ 6000	77.8	81.7	81.8	81.9	82.0	82.0	82.0	82.0	82.0	82.3	82.3	82.3	82.3	82.4	82.4	82.5
≥ 5000	79.0	83.0	83.2	83.3	83.4	83.4	83.4	83.4	83.4	83.7	83.7	83.7	83.7	83.8	83.8	83.9
≥ 4500	80.0	84.6	84.8	84.9	85.1	85.1	85.1	85.1	85.1	85.3	85.3	85.3	85.3	85.4	85.4	85.5
≥ 4000	80.9	85.9	86.1	86.5	86.6	86.6	86.6	86.6	86.6	86.8	86.8	86.8	86.8	86.9	86.9	87.0
≥ 3500	81.5	86.7	86.9	87.2	87.3	87.3	87.3	87.3	87.3	87.5	87.5	87.5	87.5	87.6	87.6	87.7
≥ 3000	82.2	87.5	87.7	88.1	88.2	88.2	88.2	88.2	88.2	88.4	88.4	88.4	88.4	88.5	88.5	88.6
≥ 2500	82.8	88.5	88.7	89.0	89.1	89.1	89.1	89.1	89.1	89.4	89.4	89.4	89.4	89.5	89.5	89.6
≥ 2000	83.3	89.1	89.4	89.7	89.8	89.8	89.8	89.8	89.8	89.9	89.9	89.9	89.9	90.1	90.1	90.2
≥ 1800	83.3	89.1	89.4	89.7	89.8	89.8	89.8	89.8	89.8	89.9	89.9	89.9	89.9	90.1	90.1	90.2
≥ 1500	84.0	89.9	90.1	90.5	90.6	90.6	90.6	90.8	90.9	90.9	90.9	91.1	91.1	91.1	91.2	91.3
≥ 1200	84.8	91.2	91.4	91.8	92.0	92.0	92.2	92.4	92.4	92.6	92.6	92.6	92.6	92.7	92.7	92.8
≥ 1000	85.2	91.6	91.8	92.3	92.5	92.6	92.9	93.2	93.2	93.5	93.5	93.5	93.5	93.7	93.7	93.8
≥ 900	85.4	91.9	92.2	92.6	92.8	92.9	93.2	93.5	93.5	93.9	93.9	93.9	93.9	94.0	94.0	94.1
≥ 800	85.5	92.3	92.5	92.9	93.1	93.2	93.5	93.9	93.9	94.2	94.3	94.3	94.3	94.4	94.4	94.5
≥ 700	85.8	93.0	93.4	93.9	94.1	94.2	94.5	94.9	94.9	95.5	95.6	95.6	95.6	95.7	95.7	95.8
≥ 600	85.9	93.2	93.7	94.1	94.4	94.5	94.8	95.3	95.3	95.8	95.9	95.9	95.9	96.0	96.0	96.1
≥ 500	85.9	93.3	94.0	94.4	94.7	95.1	95.4	95.9	95.9	96.5	96.6	96.6	96.6	96.8	96.8	96.9
≥ 400	85.9	93.3	94.1	94.5	94.8	95.4	95.7	96.5	96.6	97.6	97.7	97.7	97.7	98.1	98.1	98.2
≥ 300	85.9	93.3	94.1	94.5	94.9	95.6	96.0	96.8	96.9	98.0	98.1	98.1	98.1	98.4	98.4	98.6
≥ 200	85.9	93.3	94.1	94.5	95.1	95.8	96.2	97.1	97.2	98.3	98.5	98.6	98.6	99.2	99.2	99.5
≥ 100	85.9	93.3	94.1	94.5	95.1	95.8	96.3	97.3	97.4	98.5	98.7	98.8	98.8	99.6	99.6	100.0
≥ 0	85.9	93.3	94.1	94.5	95.1	95.8	96.3	97.3	97.4	98.5	98.7	98.8	98.8	99.6	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

JCT

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.5	54.5	54.5	54.5	54.5	54.5
≥ 18000	63.7	63.8	63.8	63.8	63.8	63.9	63.9	63.9	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0
≥ 16000	64.2	64.3	64.3	64.3	64.3	64.4	64.4	64.4	64.4	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 14000	67.0	67.1	67.1	67.1	67.1	67.2	67.2	67.2	67.2	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 12000	72.8	72.9	73.0	73.0	73.1	73.2	73.2	73.2	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 10000	78.2	78.3	78.4	78.4	78.5	78.6	78.6	78.6	78.6	78.7	78.7	78.7	78.7	78.7	78.7	78.7
≥ 9000	79.2	79.4	79.5	79.5	79.6	79.7	79.7	79.7	79.7	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 8000	81.4	81.5	81.6	81.6	81.7	81.8	81.8	81.8	81.8	81.9	81.9	81.9	81.9	81.9	81.9	81.9
≥ 7000	82.8	82.9	83.0	83.0	83.1	83.2	83.2	83.2	83.2	83.3	83.3	83.3	83.3	83.3	83.3	83.3
≥ 6000	84.0	84.1	84.2	84.2	84.3	84.4	84.4	84.4	84.4	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 5000	84.6	84.7	84.8	84.8	84.9	85.1	85.1	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2
≥ 4500	85.3	85.5	85.6	85.6	85.7	85.8	85.8	85.8	85.8	85.9	85.9	85.9	85.9	85.9	85.9	85.9
≥ 4000	86.2	86.7	86.9	86.9	87.0	87.1	87.1	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 3500	87.0	87.5	87.7	87.7	87.8	88.0	88.0	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 3000	87.3	88.0	88.2	88.2	88.3	88.4	88.4	88.4	88.4	88.5	88.5	88.5	88.5	88.5	88.5	88.5
≥ 2500	87.4	88.2	88.4	88.4	88.5	88.6	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7
≥ 2000	88.6	89.8	90.0	90.0	90.2	90.3	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 1800	88.7	89.9	90.1	90.1	90.3	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 1500	89.5	91.4	91.7	91.7	91.9	92.2	92.2	92.4	92.4	92.5	92.5	92.5	92.5	92.5	92.5	92.5
≥ 1200	90.0	92.5	92.8	92.8	93.0	93.2	93.2	93.4	93.7	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 1000	90.3	93.1	93.5	93.5	93.8	94.0	94.0	94.4	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 900	90.3	93.2	93.7	93.7	94.0	94.3	94.3	94.7	94.9	95.1	95.1	95.1	95.1	95.1	95.1	95.1
≥ 800	90.6	93.7	94.1	94.1	94.4	94.7	94.7	95.3	95.6	95.8	95.8	95.8	95.8	95.8	95.8	95.8
≥ 700	90.8	94.1	94.6	94.6	94.9	95.3	95.3	95.8	96.1	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 600	91.0	94.3	94.8	94.8	95.2	95.5	95.5	96.1	96.6	96.8	96.8	96.9	96.9	96.9	96.9	96.9
≥ 500	91.0	94.6	95.2	95.2	95.5	95.8	95.8	96.6	97.0	97.3	97.3	97.4	97.4	97.4	97.4	97.4
≥ 400	91.0	94.6	95.4	95.4	95.8	96.1	96.3	97.2	97.7	98.2	98.2	98.3	98.4	98.4	98.4	98.4
≥ 300	91.0	94.6	95.4	95.4	96.1	96.6	96.9	97.7	98.3	98.8	98.8	98.9	99.0	99.1	99.2	99.2
≥ 200	91.0	94.6	95.4	95.4	96.1	96.6	96.9	97.7	98.3	98.8	98.8	98.9	99.1	99.2	99.4	99.5
≥ 100	91.0	94.6	95.4	95.4	96.1	96.6	96.9	97.7	98.3	98.9	98.9	99.1	99.5	99.6	99.9	100.0
≥ 0	91.0	94.6	95.4	95.4	96.1	96.6	96.9	97.7	98.3	98.9	98.9	99.1	99.5	99.6	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	51.4	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
≥ 20000	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
≥ 18000	63.8	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
≥ 16000	64.2	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 14000	67.2	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
≥ 12000	70.6	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
≥ 10000	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 9000	77.2	77.3	77.3	77.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
≥ 8000	79.9	80.0	80.0	80.0	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
≥ 7000	80.8	80.9	80.9	80.9	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0
≥ 6000	82.2	82.3	82.3	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
≥ 5000	83.8	83.9	83.9	83.9	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
≥ 4500	84.7	84.8	84.8	84.8	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 4000	87.4	87.5	87.5	87.5	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 3500	87.8	88.2	88.2	88.2	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
≥ 3000	88.7	89.2	89.2	89.4	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
≥ 2500	89.8	90.3	90.3	90.4	90.8	90.8	90.8	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
≥ 2000	90.8	91.6	91.6	91.7	92.0	92.0	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 1800	91.0	91.9	91.9	92.0	92.4	92.4	92.4	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
≥ 1500	92.2	93.8	93.9	94.1	94.4	94.4	94.4	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 1200	92.4	94.0	94.3	94.5	95.1	95.2	95.2	95.3	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 1000	92.7	94.4	94.7	94.9	95.7	95.8	95.8	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 900	92.8	94.5	94.9	95.2	96.0	96.1	96.1	96.3	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
≥ 800	92.9	94.7	95.2	95.4	96.2	96.3	96.3	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 700	92.9	95.2	95.7	95.9	96.8	97.0	97.1	97.3	97.5	97.6	97.6	97.7	97.7	97.7	97.7	97.7
≥ 600	92.9	95.2	95.7	96.0	97.0	97.2	97.4	97.6	97.8	98.0	98.1	98.2	98.2	98.2	98.2	98.2
≥ 500	92.9	95.4	95.9	96.5	97.5	97.7	98.1	98.3	98.5	98.6	98.7	98.8	98.8	98.8	98.8	98.8
≥ 400	92.9	95.4	95.9	96.5	97.6	98.0	98.3	98.5	98.7	98.8	98.9	99.0	99.0	99.0	99.0	99.0
≥ 300	92.9	95.5	96.0	96.6	97.7	98.2	98.7	98.9	99.2	99.4	99.5	99.6	99.6	99.6	99.6	99.6
≥ 200	92.9	95.5	96.0	96.6	97.8	98.3	98.9	99.1	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0
≥ 100	92.9	95.5	96.0	96.6	97.8	98.3	98.9	99.1	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0
≥ 0	92.9	95.5	96.0	96.6	97.8	98.3	98.9	99.1	99.5	99.7	99.8	99.9	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
1 Jul 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

OCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING ≥ 20000	49.6 61.3	49.6 61.3	49.6 61.3	49.6 61.3	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4	49.7 61.4
≥ 18000 IV 16000	62.0 62.5	62.0 62.5	62.0 62.5	62.0 62.5	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6	62.2 62.6
IV 14000 IV 12000	64.3 68.5	64.3 68.7	64.3 68.7	64.3 68.7	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8	64.4 68.8
IV 10000 IV 9000	74.2 75.1	74.4 75.3	74.4 75.3	74.4 75.3	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4	74.5 75.4
IV 8000 IV 7000	78.6 80.1	78.8 80.3	78.8 80.3	78.8 80.3	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4	78.9 80.4
IV 6000 IV 5000	83.2 85.1	83.4 85.4	83.4 85.4	83.4 85.4	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5	83.5 85.5
IV 4500 IV 4000	85.8 88.2	86.5 89.0	86.5 89.0	86.5 89.0	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1	86.6 89.1
IV 3500 IV 3000	89.0 90.3	90.2 91.8	90.2 91.8	90.2 91.9	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0	90.3 92.0
IV 2500 IV 2000	91.2 91.7	92.8 93.5	92.8 93.5	92.9 93.7	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8	93.0 93.8
IV 1800 IV 1500	91.9 92.5	93.9 94.9	93.9 95.2	94.0 95.3	94.1 95.4	94.1 95.4	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5	94.2 95.5
IV 1200 IV 1000	92.7 92.9	95.4 95.8	95.6 96.0	95.7 96.1	95.9 96.6	95.9 96.6	96.0 96.7	96.0 96.7	96.0 96.7	96.0 96.7	96.0 96.8	96.0 96.8	96.0 96.9	96.0 97.0	96.0 97.0	96.0 97.0
IV 900 IV 800	92.9 92.9	95.8 95.8	96.0 96.0	96.1 96.1	96.6 96.6	96.6 96.6	96.7 96.7	96.7 96.7	96.7 96.7	96.7 96.7	96.8 96.8	96.8 96.8	96.9 97.0	97.0 97.0	97.0 97.0	97.0 97.0
IV 700 IV 600	92.9 92.9	96.1 96.2	96.3 96.6	96.5 96.7	97.0 97.2	97.1 97.3	97.2 97.5	97.3 97.6	97.3 97.7	97.4 98.1	97.4 98.1	97.5 98.2	97.6 98.3	97.6 98.3	97.6 98.3	97.6 98.3
IV 500 IV 400	93.1 93.1	96.8 96.8	97.1 97.1	97.2 97.4	97.8 98.1	98.0 98.2	98.2 98.4	98.3 98.6	98.4 98.7	98.8 99.1	98.8 99.1	99.0 99.4	99.1 99.5	99.1 99.5	99.1 99.5	99.1 99.5
IV 300 IV 200	93.1 93.1	96.8 96.8	97.2 97.2	97.5 97.5	98.2 98.2	98.3 98.3	98.5 98.5	98.7 98.7	98.9 99.1	99.4 99.6	99.4 99.6	99.6 99.8	99.7 99.9	99.8 100.0	99.8 100.0	99.8 100.0
IV 100 IV 0	93.1 93.1	96.8 96.8	97.2 97.2	97.5 97.5	98.2 98.2	98.3 98.3	98.5 98.5	98.7 98.7	99.1 99.1	99.6 99.6	99.6 99.6	99.8 99.8	99.9 99.9	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	48.0	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
≥ 20000	55.1	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
≥ 18000	55.5	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
IV 16000	55.7	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
IV 14000	57.0	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
IV 12000	61.4	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
IV 10000	67.3	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
IV 9000	68.0	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
IV 8000	70.1	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
IV 7000	71.8	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
IV 6000	73.3	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
IV 5000	74.3	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
IV 4500	75.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
IV 4000	75.5	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
IV 3500	75.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
IV 3000	76.6	90.6	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
IV 2500	77.1	91.5	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
IV 2000	78.4	93.7	93.8	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
IV 1800	78.5	93.8	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
IV 1500	78.7	94.5	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
IV 1200	78.8	94.9	95.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
IV 1000	78.9	95.7	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.0	96.0	96.0	96.0	96.0
IV 900	78.9	95.7	95.8	96.0	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.5	96.5	96.5	96.5	96.5
IV 800	78.9	95.7	95.9	96.1	96.3	96.5	96.5	96.5	96.5	96.5	96.5	96.6	96.6	96.6	96.6	96.6
IV 700	79.0	96.2	96.5	96.7	96.9	97.0	97.0	97.1	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2
IV 600	79.1	96.7	96.9	97.1	97.3	97.4	97.4	97.5	97.5	97.5	97.5	97.6	97.6	97.6	97.6	97.6
IV 500	79.1	96.8	97.0	97.3	97.5	97.6	97.7	98.0	98.0	98.2	98.5	98.5	98.5	98.5	98.5	98.5
IV 400	79.1	96.9	97.1	97.5	98.0	98.1	98.2	98.4	98.4	98.6	98.9	98.9	98.9	98.9	98.9	98.9
IV 300	79.1	96.9	97.1	97.6	98.3	98.4	98.7	99.0	99.0	99.2	99.6	99.6	99.6	99.6	99.7	99.7
IV 200	79.1	96.9	97.1	97.6	98.4	98.5	98.9	99.2	99.2	99.5	99.9	99.9	99.9	99.9	100.0	100.0
IV 100	79.1	96.9	97.1	97.6	98.4	98.5	98.9	99.2	99.2	99.5	99.9	99.9	99.9	99.9	100.0	100.0
IV 0	79.1	96.9	97.1	97.6	98.4	98.5	98.9	99.2	99.2	99.5	99.9	99.9	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS UTC

CEILING FEET.	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	48.6	58.5	58.5	58.5	58.6	58.6	58.6	58.6	58.6	58.7	58.7	58.7	58.7	58.7	58.7	58.7
≥ 20000	55.7	68.4	68.4	68.4	68.5	68.5	68.5	68.5	68.5	68.6	68.6	68.6	68.6	68.6	68.6	68.6
≥ 18000	55.9	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 16000	55.9	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.8	68.8	68.8	68.8	68.8	68.8	68.8
≥ 14000	56.5	69.1	69.1	69.1	69.2	69.2	69.2	69.2	69.2	69.4	69.4	69.4	69.4	69.4	69.4	69.4
≥ 12000	59.9	72.9	72.9	72.9	73.0	73.0	73.0	73.0	73.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 10000	64.6	79.0	79.0	79.0	79.1	79.1	79.1	79.1	79.1	79.2	79.2	79.2	79.2	79.2	79.2	79.2
≥ 9000	65.4	79.8	79.8	79.8	79.9	79.9	79.9	79.9	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 8000	66.9	81.3	81.3	81.3	81.4	81.4	81.4	81.4	81.4	81.5	81.5	81.5	81.5	81.5	81.5	81.5
≥ 7000	67.7	82.6	82.6	82.6	82.7	82.7	82.7	82.7	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8
≥ 6000	69.2	84.8	84.8	84.8	84.9	84.9	84.9	84.9	84.9	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 5000	69.6	85.9	85.9	85.9	86.0	86.0	86.0	86.0	86.0	86.1	86.1	86.1	86.1	86.1	86.1	86.1
≥ 4500	70.1	86.9	86.9	86.9	87.0	87.0	87.0	87.0	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1
≥ 4000	71.0	88.0	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.2	88.2	88.2	88.2	88.2	88.2	88.2
≥ 3500	71.2	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 3000	71.9	89.6	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8
≥ 2500	72.0	89.9	89.9	89.9	90.0	90.0	90.1	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.2
≥ 2000	72.4	91.1	91.1	91.2	91.5	91.6	91.7	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 1800	72.6	91.3	91.3	91.4	91.7	91.8	91.9	91.9	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1500	72.6	91.6	91.6	91.7	92.2	92.3	92.4	92.5	92.6	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1200	72.8	92.5	92.5	92.6	93.0	93.1	93.2	93.3	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5
≥ 1000	72.8	92.9	93.0	93.1	93.8	93.9	94.1	94.2	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4
≥ 900	72.8	93.0	93.1	93.2	93.9	94.0	94.2	94.3	94.4	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 800	72.8	93.2	93.3	93.4	94.1	94.2	94.4	94.5	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 700	72.8	93.8	93.9	94.0	94.7	94.8	95.1	95.4	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 600	72.8	94.1	94.2	94.4	95.2	95.3	95.5	96.0	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 500	72.8	94.3	94.4	94.6	95.4	95.5	95.9	96.6	96.7	97.2	97.3	97.3	97.3	97.3	97.3	97.3
≥ 400	72.8	94.3	94.4	94.6	95.4	95.5	96.0	96.8	96.9	97.5	97.6	97.6	97.6	97.6	97.6	97.6
≥ 300	72.8	94.7	94.8	95.1	96.1	96.2	96.8	97.5	97.8	98.6	98.7	98.8	99.0	99.1	99.1	99.1
≥ 200	72.8	94.7	94.8	95.1	96.1	96.2	96.8	97.6	98.1	98.8	98.9	99.0	99.2	99.4	99.4	99.5
≥ 100	72.8	94.7	94.8	95.1	96.1	96.2	96.8	97.7	98.2	99.0	99.1	99.2	99.5	99.6	99.6	99.8
≥ 0	72.8	94.7	94.8	95.1	96.1	96.2	96.8	97.7	98.2	99.0	99.1	99.2	99.5	99.6	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

UCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS 1-24

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	51.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.6	56.6	56.6	56.6	56.6	56.6	56.6
≥ 20000	59.7	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.4	66.4	66.4	66.4	66.4	66.4	66.4
≥ 18000	59.9	66.5	66.5	66.5	66.5	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.7
≥ 16000	60.2	66.7	66.7	66.7	66.8	66.8	66.8	66.8	66.8	66.9	66.9	66.9	66.9	66.9	66.9	66.9
≥ 14000	61.5	68.1	68.1	68.1	68.1	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.3
≥ 12000	65.5	72.2	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 10000	70.4	77.7	77.7	77.7	77.8	77.8	77.8	77.8	77.8	77.9	77.9	77.9	77.9	77.9	77.9	77.9
≥ 9000	71.2	78.4	78.5	78.5	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.7
≥ 8000	73.1	80.5	80.5	80.5	80.6	80.6	80.6	80.6	80.6	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 7000	74.2	81.8	81.9	81.9	81.9	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.1	82.1
≥ 6000	75.9	83.8	83.8	83.8	83.9	83.9	83.9	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.1
≥ 5000	77.0	85.2	85.2	85.2	85.3	85.3	85.3	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.5
≥ 4500	77.7	86.3	86.3	86.3	86.4	86.4	86.4	86.4	86.4	86.5	86.5	86.5	86.5	86.5	86.5	86.6
≥ 4000	78.9	87.8	87.8	87.9	88.0	88.0	88.0	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 3500	79.3	88.5	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.9
≥ 3000	80.0	89.4	89.4	89.5	89.6	89.6	89.6	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.8
≥ 2500	80.5	90.1	90.2	90.3	90.4	90.4	90.4	90.4	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.6
≥ 2000	81.2	91.2	91.3	91.5	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.8	91.8	91.8
≥ 1800	81.3	91.4	91.5	91.6	91.7	91.8	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	92.0
≥ 1500	81.8	92.4	92.6	92.7	92.9	92.9	93.0	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 1200	82.2	93.1	93.4	93.6	93.8	93.9	94.0	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1000	82.3	93.6	94.0	94.1	94.5	94.6	94.7	94.9	94.9	95.0	95.0	95.0	95.0	95.1	95.1	95.1
≥ 900	82.4	93.8	94.1	94.3	94.8	94.9	95.0	95.1	95.2	95.3	95.3	95.3	95.3	95.3	95.4	95.4
≥ 800	82.5	94.0	94.3	94.5	94.9	95.1	95.2	95.4	95.5	95.6	95.6	95.6	95.6	95.6	95.7	95.7
≥ 700	82.6	94.4	94.9	95.1	95.5	95.7	95.8	96.1	96.2	96.3	96.4	96.4	96.4	96.4	96.4	96.5
≥ 600	82.6	94.7	95.1	95.4	95.9	96.1	96.3	96.6	96.7	96.9	96.9	97.0	97.0	97.0	97.0	97.1
≥ 500	82.7	94.9	95.4	95.7	96.2	96.5	96.7	97.1	97.2	97.5	97.6	97.7	97.7	97.7	97.8	97.8
≥ 400	82.7	94.9	95.5	95.8	96.5	96.8	97.1	97.6	97.8	98.2	98.3	98.3	98.4	98.4	98.4	98.5
≥ 300	82.7	95.0	95.6	96.0	96.8	97.2	97.6	98.1	98.4	98.8	98.9	99.0	99.1	99.2	99.2	99.3
≥ 200	82.7	95.0	95.7	96.0	96.9	97.2	97.7	98.3	98.6	99.0	99.2	99.3	99.4	99.5	99.5	99.6
≥ 100	82.7	95.0	95.7	96.0	96.9	97.3	97.8	98.4	98.7	99.2	99.3	99.4	99.6	99.7	99.8	100.0
≥ 0	82.7	95.0	95.7	96.0	96.9	97.3	97.8	98.4	98.7	99.2	99.3	99.4	99.6	99.7	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

7440

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24117

MALMSTROM AFB MT/GREAT FALLS

68-77

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS (LT)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	41.6	52.8	53.0	53.1	53.1	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
≥ 20000	47.9	61.1	61.3	61.6	61.6	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 18000	48.0	61.4	61.7	61.9	61.9	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 16000	48.4	61.9	62.1	62.2	62.2	62.2	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
≥ 14000	49.6	63.0	63.2	63.4	63.4	63.4	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
≥ 12000	52.8	67.8	68.0	68.2	68.2	68.2	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
≥ 10000	58.6	75.0	75.2	75.4	75.4	75.4	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
≥ 9000	58.7	75.7	75.9	76.1	76.1	76.1	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
≥ 8000	60.2	77.4	77.7	77.9	77.9	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 7000	61.2	78.6	78.8	79.0	79.0	79.0	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1
≥ 6000	62.1	79.6	79.8	80.0	80.0	80.0	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
≥ 5000	63.8	81.9	82.1	82.3	82.3	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
≥ 4500	64.4	83.1	83.3	83.7	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
≥ 4000	66.2	85.9	86.2	86.6	86.6	86.6	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 3500	67.3	87.3	87.8	88.1	88.1	88.1	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
≥ 3000	68.2	88.7	89.1	89.4	89.4	89.4	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
≥ 2500	68.4	89.2	89.7	90.0	90.0	90.0	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.3	90.3	90.3
≥ 2000	68.8	89.8	90.2	90.6	90.6	90.6	90.7	90.8	90.8	90.8	90.8	90.9	90.9	91.0	91.0	91.0
≥ 1800	69.0	90.2	90.7	91.0	91.0	91.0	91.1	91.2	91.2	91.2	91.2	91.3	91.3	91.4	91.4	91.4
≥ 1500	69.0	90.9	91.3	91.9	91.9	91.9	92.1	92.8	92.8	92.8	92.8	92.9	92.9	93.0	93.0	93.0
≥ 1200	69.1	91.4	91.9	92.4	92.4	92.4	92.8	93.7	93.9	93.9	93.9	94.0	94.0	94.1	94.1	94.1
≥ 1000	69.1	91.6	92.0	92.6	92.6	92.6	93.1	94.2	94.6	94.7	94.8	94.9	94.9	95.0	95.0	95.0
≥ 900	69.3	92.0	92.6	93.1	93.1	93.1	93.7	94.8	95.1	95.2	95.3	95.4	95.4	95.6	95.6	95.6
≥ 800	69.3	92.1	92.7	93.2	93.2	93.2	93.9	95.0	95.4	95.6	95.7	95.8	95.8	95.9	95.9	95.9
≥ 700	69.3	92.2	92.8	93.3	93.3	93.3	94.0	95.1	95.6	95.8	95.9	96.0	96.0	96.1	96.1	96.1
≥ 600	69.3	92.3	92.9	93.4	93.4	93.4	94.3	95.4	95.9	96.1	96.3	96.4	96.4	96.6	96.6	96.6
≥ 500	69.3	92.6	93.2	93.8	93.9	93.9	94.8	95.9	96.3	96.6	96.8	96.9	96.9	97.0	97.0	97.0
≥ 400	69.3	92.8	93.4	94.0	94.1	94.1	95.0	96.2	96.7	96.9	97.1	97.2	97.2	97.3	97.3	97.3
≥ 300	69.3	92.9	93.6	94.1	94.2	94.2	95.3	96.6	97.0	97.2	97.6	97.8	97.8	98.0	98.0	98.0
≥ 200	69.3	92.9	93.6	94.1	94.3	94.3	95.4	96.7	97.1	97.3	97.8	98.0	98.0	98.2	98.2	98.2
≥ 100	69.3	92.9	93.6	94.1	94.3	94.3	95.4	96.7	97.1	97.3	97.8	98.0	98.0	98.2	98.2	98.2
≥ 0	69.3	92.9	93.6	94.1	94.3	94.3	95.4	96.7	97.1	97.3	97.8	98.0	98.0	98.2	98.2	98.2

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC FORM 1 JUL 64 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

08-77
YEARS

NOV
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS T-5

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING	39.3	50.3	50.4	50.4	50.8	50.8	50.8	50.8	50.9	50.9	50.9	50.9	51.0	51.1	51.1	51.2
≥ 20000	47.6	61.9	62.0	62.0	62.3	62.3	62.3	62.3	62.4	62.4	62.4	62.4	62.6	62.7	62.7	62.8
≥ 18000	47.6	61.9	62.0	62.0	62.3	62.3	62.3	62.3	62.4	62.4	62.4	62.4	62.6	62.7	62.7	62.8
≥ 16000	47.6	61.9	62.0	62.0	62.3	62.3	62.3	62.3	62.4	62.4	62.4	62.4	62.6	62.7	62.7	62.8
≥ 14000	48.1	62.4	62.6	62.6	62.9	62.9	62.9	62.9	63.0	63.0	63.0	63.0	63.1	63.2	63.2	63.3
≥ 12000	51.4	67.1	67.2	67.2	67.7	67.7	67.7	67.7	67.8	67.8	67.8	67.8	67.9	68.0	68.0	68.1
≥ 10000	57.2	74.2	74.3	74.3	74.8	74.8	74.8	74.8	74.9	75.0	75.0	75.0	75.1	75.2	75.2	75.3
≥ 9000	57.3	74.9	75.0	75.0	75.4	75.4	75.4	75.4	75.6	75.7	75.7	75.7	75.8	75.9	75.9	76.0
≥ 8000	59.4	77.0	77.1	77.1	77.6	77.6	77.6	77.6	77.7	77.8	77.8	77.8	77.9	78.0	78.0	78.1
≥ 7000	60.1	77.8	77.9	77.9	78.3	78.3	78.3	78.3	78.4	78.6	78.6	78.6	78.7	78.8	78.8	78.9
≥ 6000	60.4	78.1	78.2	78.2	78.7	78.7	78.7	78.7	78.8	78.9	78.9	78.9	79.0	79.1	79.1	79.2
≥ 5000	61.8	80.2	80.3	80.3	80.8	80.8	80.8	80.8	80.9	81.0	81.0	81.0	81.1	81.2	81.2	81.3
≥ 4500	62.6	81.4	81.6	81.6	82.0	82.0	82.0	82.0	82.1	82.2	82.2	82.2	82.3	82.4	82.4	82.6
≥ 4000	64.1	83.6	83.7	83.7	84.1	84.1	84.1	84.1	84.2	84.3	84.3	84.3	84.4	84.6	84.6	84.7
≥ 3500	65.6	85.0	85.1	85.1	85.6	85.6	85.6	85.6	85.7	85.8	85.8	85.8	85.9	86.0	86.0	86.1
≥ 3000	65.9	86.2	86.3	86.3	86.8	86.8	86.8	86.9	87.0	87.1	87.1	87.1	87.2	87.3	87.3	87.4
≥ 2500	66.6	87.4	87.6	87.6	88.0	88.0	88.0	88.1	88.3	88.4	88.6	88.6	88.7	88.8	88.8	88.9
≥ 2000	67.0	88.3	88.6	88.6	89.0	89.1	89.3	89.6	89.7	89.8	89.8	89.8	89.9	90.1	90.1	90.2
≥ 1800	67.0	88.4	88.6	88.8	89.3	89.4	89.7	89.9	90.0	90.1	90.1	90.1	90.2	90.4	90.4	90.6
≥ 1500	67.2	88.9	89.4	89.4	90.0	90.1	90.3	90.6	90.9	91.0	91.0	91.0	91.1	91.3	91.3	91.4
≥ 1200	67.4	89.9	90.4	90.4	91.1	91.2	91.8	92.6	92.9	93.0	93.0	93.0	93.1	93.3	93.3	93.4
≥ 1000	67.7	90.6	91.1	91.1	91.9	92.1	92.7	93.4	93.9	94.0	94.0	94.0	94.1	94.3	94.3	94.4
≥ 900	67.9	90.9	91.6	91.6	92.6	92.8	93.3	94.3	94.8	94.9	94.9	94.9	95.0	95.2	95.2	95.3
≥ 800	67.9	90.9	91.6	91.6	92.6	92.8	93.3	94.3	94.8	94.9	94.9	94.9	95.0	95.2	95.2	95.3
≥ 700	67.9	90.9	91.6	91.6	92.6	92.8	93.3	94.4	94.9	95.0	95.0	95.0	95.1	95.3	95.3	95.4
≥ 600	67.9	91.1	91.8	91.8	92.8	93.1	93.7	94.8	95.3	95.6	95.6	95.6	95.7	95.9	96.0	96.1
≥ 500	67.9	91.1	91.9	91.9	92.9	93.2	93.9	95.1	95.7	95.9	95.9	95.9	96.1	96.3	96.6	96.7
≥ 400	67.9	91.1	91.9	91.9	92.9	93.2	93.9	95.2	95.8	96.1	96.1	96.1	96.3	96.7	96.9	97.0
≥ 300	67.9	91.1	91.9	91.9	92.9	93.6	94.2	95.6	96.1	96.4	96.4	96.4	96.7	97.1	97.4	97.6
≥ 200	67.9	91.1	91.9	91.9	92.9	93.6	94.2	95.7	96.2	96.6	96.6	96.6	96.8	97.3	97.9	98.0
≥ 100	67.9	91.1	91.9	91.9	92.9	93.6	94.2	95.7	96.2	96.6	96.7	96.7	97.0	97.6	98.1	98.7
≥ 0	67.9	91.1	91.9	91.9	92.9	93.6	94.2	95.7	96.2	96.6	96.7	96.7	97.0	97.6	98.1	100.0

TOTAL NUMBER OF OBSERVATIONS

000

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	39.4	44.7	44.8	44.8	44.9	44.9	44.9	44.9	44.9	45.0	45.0	45.0	45.0	45.0	45.0	45.0
≥ 20000	49.7	57.6	57.7	57.7	57.8	57.8	57.8	57.8	57.8	57.9	57.9	57.9	58.0	58.0	58.0	58.0
≥ 18000	49.7	57.6	57.7	57.7	57.8	57.8	57.8	57.8	57.8	57.9	57.9	57.9	58.0	58.0	58.0	58.0
≥ 16000	49.7	57.6	57.7	57.7	57.8	57.8	57.8	57.8	57.8	57.9	57.9	57.9	58.0	58.0	58.0	58.0
≥ 14000	50.9	58.8	58.9	58.9	59.0	59.0	59.0	59.0	59.0	59.1	59.1	59.1	59.2	59.2	59.2	59.2
≥ 12000	55.7	63.6	63.7	63.7	63.8	63.8	63.8	63.8	63.8	63.9	63.9	63.9	64.0	64.0	64.0	64.0
≥ 10000	63.7	72.3	72.4	72.6	72.7	72.7	72.7	72.7	72.7	72.8	72.8	72.8	72.9	73.0	73.0	73.0
≥ 9000	64.3	73.3	73.4	73.6	73.7	73.7	73.7	73.7	73.7	73.8	73.8	73.8	73.9	74.0	74.0	74.0
≥ 8000	66.3	75.4	75.6	75.7	75.8	75.8	75.8	75.8	75.8	75.9	75.9	75.9	76.0	76.1	76.1	76.1
≥ 7000	68.3	77.4	77.6	77.7	77.8	77.8	77.8	77.8	77.8	77.9	77.9	77.9	78.0	78.1	78.1	78.1
≥ 6000	69.1	78.2	78.3	78.4	78.6	78.6	78.6	78.6	78.6	78.7	78.7	78.7	78.8	78.9	78.9	78.9
≥ 5000	71.2	80.9	81.0	81.1	81.4	81.4	81.4	81.6	81.6	81.7	81.7	81.7	81.8	81.9	81.9	81.9
≥ 4500	71.8	81.4	81.6	81.7	82.0	82.0	82.1	82.1	82.1	82.2	82.2	82.2	82.3	82.4	82.4	82.4
≥ 4000	72.8	82.7	82.8	82.9	83.6	83.6	83.7	83.7	83.8	83.9	83.9	83.9	84.0	84.1	84.1	84.1
≥ 3500	73.6	83.7	83.8	83.9	84.6	84.6	84.7	84.7	84.8	84.9	84.9	84.9	85.0	85.1	85.1	85.1
≥ 3000	74.7	85.3	85.4	85.6	86.2	86.2	86.3	86.3	86.4	86.6	86.6	86.6	86.7	86.8	86.8	86.8
≥ 2500	75.4	86.3	86.6	86.7	87.6	87.6	87.7	87.7	87.8	87.9	87.9	87.9	88.0	88.1	88.1	88.1
≥ 2000	75.7	86.7	86.9	87.0	87.9	87.9	88.2	88.3	88.4	88.6	88.6	88.6	88.7	88.8	88.8	88.8
≥ 1800	75.7	86.7	87.0	87.1	88.0	88.0	88.3	88.4	88.6	88.7	88.7	88.7	88.8	88.9	88.9	88.9
≥ 1500	75.8	87.3	87.7	87.9	88.9	88.9	89.3	89.6	89.7	89.9	89.9	89.9	90.0	90.1	90.1	90.1
≥ 1200	76.1	88.1	88.6	88.8	89.8	89.9	90.8	91.0	91.1	91.3	91.3	91.3	91.4	91.6	91.6	91.6
≥ 1000	76.1	88.4	88.9	89.1	90.2	90.4	91.3	91.6	91.8	92.0	92.0	92.0	92.1	92.2	92.2	92.2
≥ 900	76.1	88.6	89.1	89.3	90.4	90.8	91.9	92.1	92.4	92.8	92.8	92.8	92.9	93.0	93.0	93.0
≥ 800	76.2	88.7	89.2	89.4	90.6	90.9	92.0	92.2	92.6	93.0	93.0	93.0	93.1	93.2	93.2	93.2
≥ 700	76.3	89.2	89.8	90.0	91.1	91.4	92.6	92.8	93.1	93.6	93.6	93.6	93.7	93.8	93.8	93.8
≥ 600	76.4	90.1	90.7	90.9	92.0	92.4	93.6	93.8	94.1	94.6	94.6	94.6	94.7	94.8	94.8	94.8
≥ 500	76.4	90.2	90.8	91.0	92.2	92.7	93.9	94.2	94.6	95.1	95.1	95.1	95.2	95.4	95.4	95.4
≥ 400	76.4	90.4	91.1	91.3	92.6	93.0	94.2	94.8	95.1	95.7	95.9	95.9	96.1	96.2	96.2	96.2
≥ 300	76.4	90.4	91.1	91.3	92.6	93.2	94.6	95.1	95.4	96.0	96.2	96.2	96.4	96.6	96.7	96.7
≥ 200	76.4	90.4	91.1	91.3	92.6	93.3	94.8	95.4	95.9	96.4	96.7	96.7	97.2	97.4	97.7	97.7
≥ 100	76.4	90.4	91.1	91.3	92.6	93.3	94.8	95.4	95.9	96.4	96.7	96.7	97.3	97.6	97.9	98.2
≥ 0	76.4	90.4	91.1	91.3	92.6	93.3	94.8	95.4	95.9	96.4	96.7	96.7	97.3	97.6	98.1	100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

NOV
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/4	≥ 0
NO CEILING	42.2	42.3	42.3	42.3	42.3	42.6	42.7	42.7	42.8	42.8	42.9	42.9	42.9	42.9	42.9	43.0
≥ 20000	53.8	53.9	53.9	53.9	53.9	54.1	54.2	54.2	54.3	54.3	54.4	54.4	54.4	54.6	54.6	54.7
IV 18000	53.8	53.9	53.9	53.9	53.9	54.1	54.2	54.2	54.3	54.3	54.4	54.4	54.4	54.6	54.6	54.7
IV 16000	53.9	54.0	54.0	54.0	54.0	54.2	54.3	54.3	54.4	54.4	54.4	54.6	54.6	54.7	54.7	54.8
IV 14000	55.0	55.1	55.1	55.1	55.1	55.3	55.4	55.4	55.6	55.6	55.7	55.7	55.8	55.8	55.8	55.9
IV 12000	61.0	61.1	61.1	61.1	61.1	61.3	61.4	61.4	61.6	61.7	61.8	61.8	61.9	61.9	61.9	62.0
IV 10000	69.3	69.6	69.6	69.6	69.6	69.8	70.0	70.0	70.1	70.2	70.3	70.3	70.4	70.4	70.4	70.7
IV 9000	70.7	70.9	70.9	70.9	70.9	71.1	71.3	71.3	71.4	71.6	71.7	71.7	71.8	71.8	71.8	72.0
IV 8000	72.6	73.1	73.2	73.2	73.3	73.6	73.8	73.8	73.9	74.0	74.1	74.1	74.2	74.2	74.2	74.4
IV 7000	74.4	75.1	75.3	75.3	75.4	75.8	76.0	76.0	76.1	76.2	76.3	76.3	76.6	76.6	76.6	76.8
IV 6000	75.8	76.4	76.7	76.8	76.9	77.2	77.4	77.4	77.6	77.7	77.8	77.8	78.0	78.0	78.0	78.2
IV 5000	78.9	79.7	80.1	80.2	80.4	80.9	81.1	81.1	81.2	81.3	81.4	81.4	81.7	81.7	81.7	81.9
IV 4500	79.9	80.7	81.1	81.2	81.4	82.0	82.2	82.2	82.4	82.6	82.7	82.7	82.9	82.9	82.9	83.1
IV 4000	81.8	82.8	83.2	83.3	83.7	84.2	84.4	84.4	84.7	84.8	85.0	85.0	85.2	85.2	85.2	85.4
IV 3500	81.8	82.8	83.2	83.3	83.8	84.3	84.6	84.6	85.0	85.1	85.3	85.3	85.6	85.6	85.6	85.8
IV 3000	82.2	83.3	83.9	84.0	84.6	85.1	85.4	85.4	85.9	86.1	86.3	86.3	86.6	86.6	86.6	86.8
IV 2500	82.3	83.7	84.3	84.4	85.0	85.6	85.9	85.9	86.3	86.7	86.9	86.9	87.1	87.1	87.1	87.3
IV 2000	82.4	84.4	85.4	85.6	86.4	87.2	87.6	87.8	88.2	88.6	88.9	88.9	89.1	89.1	89.1	89.3
IV 1800	82.6	84.6	85.6	85.7	86.6	87.3	87.7	88.1	88.6	88.9	89.2	89.2	89.4	89.4	89.4	89.7
IV 1500	82.9	85.1	86.1	86.3	87.2	88.0	88.3	88.9	89.4	90.0	90.3	90.3	90.6	90.6	90.6	90.8
IV 1200	83.0	85.3	86.4	86.7	87.7	88.4	88.9	89.4	90.3	91.0	91.3	91.3	91.6	91.6	91.6	91.8
IV 1000	83.1	85.9	87.1	87.4	88.6	89.3	89.9	90.6	91.4	92.3	92.7	92.9	93.1	93.1	93.2	93.4
IV 900	83.2	86.2	87.4	87.8	88.9	89.7	90.3	91.0	92.0	93.1	93.4	93.7	93.9	93.9	94.0	94.2
IV 800	83.2	86.2	87.4	87.8	88.9	89.8	90.4	91.1	92.2	93.4	93.8	94.0	94.2	94.2	94.3	94.6
IV 700	83.3	86.4	87.7	88.0	89.2	90.1	91.0	91.7	92.8	94.2	94.7	94.9	95.1	95.1	95.2	95.4
IV 600	83.3	86.8	88.2	88.6	89.8	90.7	91.6	92.2	93.4	95.0	95.4	95.7	95.9	95.9	96.0	96.2
IV 500	83.4	86.9	88.3	88.7	90.3	91.2	92.2	93.0	94.2	96.0	96.6	96.9	97.1	97.1	97.2	97.4
IV 400	83.4	86.9	88.4	88.8	90.4	91.3	92.3	93.1	94.3	96.1	96.7	97.0	97.2	97.2	97.4	97.7
IV 300	83.4	86.9	88.4	88.8	90.6	91.6	92.6	93.3	94.6	96.4	97.0	97.3	97.6	97.6	97.8	98.0
IV 200	83.4	87.0	88.6	89.0	90.9	92.0	93.0	93.8	95.0	96.9	97.7	98.0	98.2	98.2	98.4	98.8
IV 100	83.4	87.0	88.6	89.0	90.9	92.0	93.0	93.8	95.0	96.9	97.7	98.0	98.2	98.2	98.4	98.8
IV 0	83.4	87.0	88.6	89.0	90.9	92.0	93.0	93.8	95.0	96.9	97.7	98.0	98.2	98.2	98.4	98.8

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

NUV
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS LS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING ≥ 20000	45.9 58.0	46.2 58.3	46.6 58.7	46.7 58.8	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0	46.9 59.0
≥ 18000 ≥ 16000	58.3 58.7	58.7 59.0	59.0 59.3	59.1 59.4	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7	59.3 59.7
≥ 14000 ≥ 12000	60.0 66.3	60.3 66.7	60.7 67.0	60.8 67.1	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3	61.0 67.3
≥ 10000 ≥ 9000	73.9 75.2	74.8 76.1	75.1 76.4	75.2 76.6	75.6 76.9	75.6 76.9	75.6 76.9	75.6 76.9	75.6 76.9	75.6 76.9	75.6 76.9	75.7 77.0	75.8 77.1	75.8 77.1	75.8 77.1	75.8 77.1
≥ 8000 ≥ 7000	76.6 78.9	77.7 80.0	78.0 80.3	78.1 80.4	78.4 80.8	78.4 80.8	78.4 80.8	78.4 80.8	78.4 80.8	78.4 80.8	78.4 80.8	78.6 80.9	78.7 81.0	78.7 81.0	78.7 81.0	78.7 81.0
≥ 6000 ≥ 5000	79.8 82.8	80.9 84.0	81.2 84.3	81.3 84.4	81.7 84.8	81.7 84.8	81.7 84.8	81.7 85.0	81.8 85.1	81.8 85.1	81.8 85.1	81.8 85.2	81.9 85.3	82.0 85.3	82.0 85.3	82.0 85.3
≥ 4500 ≥ 4000	83.3 84.9	84.6 86.3	85.0 87.1	85.1 87.3	85.4 87.7	85.4 87.7	85.4 87.7	85.7 87.9	85.8 88.0	85.8 88.0	85.8 88.0	85.9 88.1	86.0 88.2	86.0 88.2	86.0 88.2	86.0 88.2
≥ 3500 ≥ 3000	84.9 85.2	86.3 86.9	87.2 87.8	87.4 88.0	87.9 88.7	87.9 88.7	87.9 88.7	88.1 89.0	88.2 89.1	88.2 89.1	88.2 89.1	88.3 89.2	88.4 89.3	88.4 89.3	88.4 89.3	88.4 89.3
≥ 2500 ≥ 2000	85.3 85.6	87.0 87.3	87.9 88.2	88.2 88.6	88.9 89.4	88.9 89.7	88.9 89.7	89.2 90.0	89.3 90.1	89.3 90.1	89.3 90.1	89.4 90.2	89.6 90.3	89.6 90.3	89.6 90.3	89.6 90.3
≥ 1800 ≥ 1500	85.8 86.1	87.7 88.3	88.6 89.2	88.9 89.6	89.9 90.9	90.1 91.1	90.1 91.1	90.4 91.4	90.6 91.6	90.6 92.0	90.6 92.0	90.7 92.2	90.8 92.3	90.8 92.3	90.8 92.3	90.8 92.3
≥ 1200 ≥ 1000	86.4 86.7	89.0 89.7	90.0 90.8	90.6 91.4	91.9 92.1	92.1 92.3	92.1 92.3	92.6 93.8	92.7 94.2	92.7 95.3	92.7 95.7	93.6 95.9	93.8 96.0	93.9 96.0	93.9 96.0	93.9 96.0
≥ 900 ≥ 800	86.8 86.8	89.9 90.0	91.1 91.2	91.8 91.9	93.4 93.6	93.7 93.8	93.7 93.8	94.2 94.3	94.7 94.8	95.9 96.0	96.3 96.4	96.6 96.7	96.7 96.8	96.7 96.8	96.7 96.8	96.7 96.8
≥ 700 ≥ 600	86.8 86.8	90.0 90.1	91.2 91.3	91.9 92.2	93.6 94.0	93.8 94.2	93.8 94.2	94.4 94.9	94.9 95.3	96.2 96.8	96.8 97.7	97.0 97.9	97.1 98.0	97.1 98.0	97.3 98.2	97.3 98.2
≥ 500 ≥ 400	86.8 86.8	90.1 90.2	91.4 91.6	92.3 92.4	94.2 94.3	94.4 94.6	94.4 94.6	95.1 95.3	95.6 95.8	97.1 97.4	98.0 98.3	98.2 98.6	98.3 98.8	98.3 98.9	98.6 99.2	98.6 99.2
≥ 300 ≥ 200	86.8 86.8	90.3 90.3	91.7 91.7	92.6 92.6	94.4 94.4	94.7 94.7	94.7 94.7	95.4 95.6	95.9 96.1	97.6 97.8	98.4 98.8	98.7 99.0	98.9 99.2	99.0 99.3	99.3 99.7	99.4 99.8
≥ 100 ≥ 0	86.8 86.8	90.3 90.3	91.7 91.7	92.6 92.6	94.4 94.4	94.7 94.7	94.7 94.7	95.6 95.6	96.1 96.1	97.8 97.8	98.8 98.8	99.0 99.0	99.3 99.3	99.4 99.4	99.9 99.9	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS

900

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥0	≥0	≥0
NO CEILING	48.3	48.4	48.6	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
≥ 20000	59.0	59.1	59.3	59.5	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 18000	59.3	59.6	59.8	60.1	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
≥ 16000	59.6	59.7	60.0	60.2	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.3
≥ 14000	61.1	61.2	61.4	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 12000	67.3	67.4	67.6	67.9	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 10000	73.7	74.1	74.3	74.5	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
≥ 9000	76.3	76.8	77.0	77.2	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 8000	78.8	79.4	79.6	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 7000	81.0	81.9	82.1	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
≥ 6000	82.4	83.4	83.6	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
≥ 5000	83.8	85.3	85.5	85.8	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 4500	85.1	86.7	86.9	87.1	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 4000	86.5	88.1	88.4	88.7	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 3500	87.1	89.0	89.3	89.5	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 3000	87.5	89.7	90.0	90.2	90.9	91.0	91.0	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
≥ 2500	88.2	90.7	91.0	91.2	91.9	92.0	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 2000	88.4	91.3	91.7	92.0	92.8	92.9	92.9	93.1	93.1	93.3	93.3	93.3	93.3	93.3	93.3	93.3
≥ 1800	88.8	91.7	92.0	92.3	93.1	93.2	93.2	93.4	93.4	93.7	93.7	93.7	93.7	93.7	93.7	93.7
≥ 1500	89.3	92.4	92.8	93.1	93.9	94.0	94.0	94.2	94.2	94.7	94.8	94.8	94.8	94.8	94.8	94.8
≥ 1200	89.7	92.8	93.1	93.4	94.3	94.5	94.5	94.8	95.0	95.6	95.7	95.7	95.8	95.8	95.8	95.8
≥ 1000	89.8	93.1	93.4	93.9	95.1	95.3	95.4	95.8	96.1	97.1	97.2	97.3	97.4	97.4	97.4	97.4
≥ 900	89.8	93.3	93.7	94.2	95.4	95.7	95.8	96.1	96.4	97.4	97.6	97.7	97.8	97.8	97.8	97.8
≥ 800	89.9	93.4	93.8	94.3	95.6	95.8	95.9	96.2	96.6	97.6	97.7	97.8	97.9	97.9	97.9	97.9
≥ 700	89.9	93.5	94.0	94.5	95.8	96.0	96.1	96.4	96.8	97.9	98.0	98.1	98.2	98.2	98.3	98.3
≥ 600	90.0	93.8	94.2	94.8	96.0	96.2	96.3	96.7	97.0	98.3	98.4	98.6	98.8	98.8	98.9	98.9
≥ 500	90.1	94.0	94.5	95.1	96.3	96.6	96.7	97.0	97.4	98.9	99.0	99.1	99.3	99.3	99.6	99.6
≥ 400	90.1	94.0	94.5	95.1	96.3	96.6	96.7	97.0	97.4	98.9	99.0	99.1	99.3	99.3	99.6	99.6
≥ 300	90.1	94.1	94.7	95.2	96.4	96.7	96.8	97.1	97.7	99.1	99.3	99.4	99.7	99.7	99.9	99.9
≥ 200	90.1	94.1	94.7	95.2	96.4	96.7	96.8	97.1	97.7	99.1	99.3	99.4	99.8	99.8	100.0	100.0
≥ 100	90.1	94.1	94.7	95.2	96.4	96.7	96.8	97.1	97.7	99.1	99.3	99.4	99.8	99.8	100.0	100.0
≥ 0	90.1	94.1	94.7	95.2	96.4	96.7	96.8	97.1	97.7	99.1	99.3	99.4	99.8	99.8	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

899

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTRUM AFB MT/GREAT FALLS

68-77

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING	39.5	50.5	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
≥ 20000	45.7	59.2	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3	59.3
≥ 18000	45.8	59.6	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
≥ 16000	45.8	59.6	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
≥ 14000	47.2	61.0	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 12000	54.1	69.3	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
≥ 10000	59.0	75.4	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 9000	60.4	77.0	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
≥ 8000	63.2	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
≥ 7000	64.8	81.6	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
≥ 6000	65.9	83.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
≥ 5000	66.7	84.7	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
≥ 4500	67.2	85.8	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
≥ 4000	68.2	87.2	87.5	87.6	87.6	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
≥ 3500	69.1	88.5	88.9	89.0	89.0	89.0	89.1	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 3000	69.8	89.6	90.1	90.2	90.2	90.2	90.3	90.3	90.3	90.4	90.4	90.4	90.4	90.4	90.4	90.4
≥ 2500	70.0	90.0	90.5	90.6	90.7	90.7	90.9	90.9	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 2000	70.3	90.7	91.5	91.6	91.8	91.8	91.9	92.0	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2
≥ 1800	70.3	90.7	91.5	91.6	91.8	91.8	92.0	92.1	92.1	92.3	92.3	92.3	92.3	92.3	92.3	92.3
≥ 1500	70.6	91.9	92.8	92.9	93.0	93.0	93.3	93.4	93.5	93.9	93.9	93.9	93.9	93.9	93.9	93.9
≥ 1200	70.8	92.3	93.3	93.4	93.8	94.0	94.4	94.6	94.9	95.3	95.3	95.3	95.3	95.3	95.3	95.3
≥ 1000	71.1	93.3	94.3	94.4	95.2	95.4	96.0	96.2	96.4	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 500	71.3	93.5	94.5	94.6	95.4	95.8	96.3	96.5	96.8	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 800	71.5	93.6	94.8	95.0	95.8	96.1	96.7	96.9	97.1	97.5	97.5	97.5	97.5	97.5	97.5	97.5
≥ 700	71.5	93.6	94.8	95.0	95.8	96.1	96.7	96.9	97.1	97.8	97.8	97.8	97.8	97.9	97.9	97.9
≥ 600	71.7	94.0	95.1	95.3	96.1	96.4	97.2	97.4	97.7	98.3	98.3	98.3	98.3	98.4	98.4	98.4
≥ 500	71.9	94.2	95.3	95.5	96.3	96.8	97.5	97.8	98.0	98.7	98.7	98.7	98.7	98.8	98.8	98.8
≥ 400	71.9	94.2	95.4	95.7	96.4	96.9	97.7	97.9	98.1	98.8	98.8	98.8	98.8	98.9	98.9	98.9
≥ 300	71.9	94.2	95.4	95.7	96.4	96.9	97.8	98.0	98.2	99.0	99.2	99.2	99.2	99.3	99.3	99.3
≥ 200	71.9	94.2	95.4	95.7	96.4	96.9	97.8	98.0	98.2	99.0	99.3	99.3	99.3	99.4	99.4	99.4
≥ 100	71.9	94.2	95.4	95.7	96.4	96.9	97.8	98.0	98.2	99.0	99.4	99.4	99.4	99.6	99.6	99.6
≥ 0	71.9	94.2	95.4	95.7	96.4	96.9	97.8	98.0	98.2	99.0	99.4	99.4	99.4	99.6	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS

897

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS

68-77

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING	40.2	52.3	52.3	52.3	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5
≥ 20000	47.8	62.0	62.0	62.1	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3	62.3
≥ 18000	47.9	62.3	62.3	62.4	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 16000	47.9	62.3	62.3	62.4	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 14000	49.6	64.0	64.0	64.1	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 12000	54.0	69.5	69.5	69.6	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
≥ 10000	59.8	76.1	76.1	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
≥ 9000	60.6	77.9	77.9	78.0	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
≥ 8000	62.8	80.0	80.0	80.2	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
≥ 7000	64.3	81.7	81.7	81.8	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.2	82.2
≥ 6000	65.7	83.6	83.7	83.8	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.2	84.2
≥ 5000	66.8	85.1	85.3	85.5	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.8	85.8
≥ 4500	67.1	86.1	86.3	86.5	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.8	86.8
≥ 4000	68.3	88.1	88.3	88.5	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	89.0	89.0
≥ 3500	69.6	89.7	90.0	90.2	90.5	90.5	90.5	90.5	90.5	90.5	90.7	90.7	90.7	90.7	90.9	90.9
≥ 3000	70.1	90.3	90.6	90.9	91.2	91.2	91.2	91.2	91.2	91.2	91.4	91.4	91.4	91.4	91.5	91.5
≥ 2500	71.0	91.3	91.6	91.9	92.2	92.2	92.2	92.2	92.2	92.2	92.4	92.4	92.4	92.4	92.5	92.5
≥ 2000	71.3	91.9	92.3	92.5	92.9	93.0	93.0	93.0	93.0	93.0	93.3	93.3	93.3	93.3	93.4	93.4
≥ 1800	71.3	92.0	92.4	92.6	93.0	93.2	93.2	93.2	93.2	93.2	93.5	93.5	93.5	93.5	93.6	93.6
≥ 1500	71.5	92.4	92.9	93.1	93.8	94.0	94.1	94.1	94.1	94.1	94.4	94.4	94.4	94.4	94.5	94.5
≥ 1200	71.5	92.6	93.1	93.3	94.1	94.3	94.4	94.4	94.5	94.5	94.9	94.9	94.9	94.9	95.0	95.0
≥ 1000	71.7	93.0	93.4	93.6	94.4	94.6	94.8	94.8	95.0	95.0	95.7	95.7	95.7	95.7	95.8	95.8
≥ 900	72.2	93.8	94.2	94.4	95.3	95.3	95.7	95.7	95.9	96.5	96.5	96.5	96.5	96.5	96.7	96.7
≥ 800	72.4	94.0	94.4	94.6	95.5	95.8	95.9	95.9	96.1	96.8	96.8	96.8	96.8	96.8	96.9	96.9
≥ 700	72.4	94.1	94.5	94.8	95.7	96.0	96.1	96.1	96.3	97.1	97.1	97.1	97.1	97.1	97.2	97.2
≥ 600	72.4	94.1	94.5	94.8	95.7	96.0	96.2	96.2	96.5	97.4	97.4	97.4	97.4	97.4	97.5	97.5
≥ 500	72.4	94.1	94.6	94.9	95.8	96.1	96.3	96.3	96.7	97.5	97.5	97.5	97.5	97.5	97.7	97.7
≥ 400	72.5	94.4	95.0	95.2	96.1	96.4	96.7	96.7	97.0	97.9	97.9	97.9	97.9	97.9	98.0	98.0
≥ 300	72.5	94.5	95.1	95.3	96.2	96.5	96.8	96.8	97.1	98.0	98.2	98.2	98.2	98.3	98.4	98.4
≥ 200	72.5	94.5	95.1	95.3	96.3	96.7	97.0	97.0	97.3	98.2	98.4	98.4	98.4	98.6	98.7	99.0
≥ 100	72.5	94.5	95.1	95.3	96.3	96.7	97.0	97.0	97.3	98.2	98.4	98.4	98.4	98.6	98.7	99.3
≥ 0	72.5	94.5	95.1	95.3	96.3	96.7	97.0	97.0	97.3	98.2	98.4	98.4	98.4	98.6	98.7	100.0

TOTAL NUMBER OF OBSERVATIONS

897

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

68-77

NIIV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ¾	≥ ½	≥ 5-16	≥ ¼	≥ 0
NO CEILING	42.1	48.4	48.6	48.6	48.7	48.8	48.8	48.8	48.8	48.8	48.9	48.9	48.9	48.9	48.9	48.9
≥ 20000	51.2	59.1	59.3	59.3	59.5	59.5	59.5	59.5	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.7
≥ 18000	51.3	59.4	59.5	59.6	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.9	59.9	59.9
≥ 16000	51.5	59.5	59.6	59.7	59.8	59.9	59.9	59.9	59.9	59.9	59.9	60.0	60.0	60.0	60.0	60.0
≥ 14000	52.7	60.7	60.9	60.9	61.1	61.1	61.1	61.1	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.3
≥ 12000	57.8	66.6	66.7	66.8	66.9	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.1	67.1	67.1
≥ 10000	64.4	73.9	74.1	74.2	74.3	74.4	74.4	74.4	74.4	74.4	74.5	74.5	74.5	74.5	74.6	74.6
≥ 9000	65.5	75.3	75.5	75.6	75.7	75.7	75.8	75.8	75.8	75.8	75.9	75.9	75.9	75.9	76.0	76.0
≥ 8000	67.5	77.5	77.7	77.8	77.9	78.0	78.0	78.0	78.0	78.1	78.1	78.1	78.1	78.2	78.2	78.2
≥ 7000	69.1	79.3	79.5	79.5	79.7	79.7	79.8	79.8	79.8	79.8	79.9	79.9	79.9	80.0	80.0	80.1
≥ 6000	70.2	80.5	80.7	80.8	81.0	81.0	81.1	81.1	81.1	81.1	81.1	81.2	81.2	81.3	81.3	81.3
≥ 5000	72.0	82.7	83.0	83.1	83.3	83.4	83.4	83.5	83.5	83.5	83.6	83.6	83.6	83.7	83.7	83.7
≥ 4500	72.7	83.7	84.0	84.1	84.3	84.4	84.5	84.5	84.6	84.6	84.6	84.6	84.7	84.7	84.7	84.8
≥ 4000	74.1	85.6	85.9	86.1	86.4	86.5	86.5	86.6	86.6	86.6	86.7	86.7	86.7	86.8	86.8	86.9
≥ 3500	74.9	86.5	86.9	87.1	87.4	87.5	87.6	87.6	87.7	87.8	87.8	87.8	87.8	87.9	87.9	88.0
≥ 3000	75.5	87.5	87.9	88.1	88.5	88.6	88.7	88.8	88.9	88.9	89.0	89.0	89.1	89.1	89.1	89.2
≥ 2500	75.9	88.2	88.6	88.8	89.3	89.4	89.5	89.6	89.7	89.8	89.8	89.8	89.9	89.9	89.9	90.0
≥ 2000	76.2	88.8	89.4	89.5	90.1	90.3	90.4	90.6	90.7	90.8	90.9	90.9	91.0	91.0	91.0	91.1
≥ 1800	76.3	89.0	89.6	89.8	90.3	90.5	90.7	90.9	90.9	91.1	91.2	91.2	91.3	91.3	91.3	91.4
≥ 1500	76.5	89.7	90.3	90.5	91.2	91.4	91.7	91.9	92.0	92.3	92.4	92.4	92.5	92.5	92.6	92.6
≥ 1200	76.8	90.2	90.9	91.1	91.9	92.2	92.6	92.9	93.2	93.5	93.6	93.7	93.8	93.8	93.8	93.9
≥ 1000	76.9	90.7	91.4	91.7	92.6	93.0	93.5	93.8	94.2	94.8	94.9	94.9	95.0	95.1	95.1	95.2
≥ 900	77.1	91.0	91.8	92.1	93.1	93.4	94.0	94.4	94.8	95.4	95.5	95.6	95.7	95.7	95.8	95.8
≥ 800	77.1	91.1	91.9	92.2	93.2	93.6	94.1	94.6	95.0	95.6	95.7	95.8	95.9	95.9	96.0	96.0
≥ 700	77.2	91.3	92.0	92.4	93.4	93.8	94.3	94.8	95.2	96.0	96.1	96.2	96.3	96.3	96.4	96.5
≥ 600	77.2	91.5	92.3	92.7	93.7	94.2	94.8	95.2	95.7	96.5	96.7	96.8	96.9	97.0	97.1	97.1
≥ 500	77.3	91.6	92.5	92.9	94.0	94.5	95.1	95.6	96.1	97.0	97.2	97.3	97.4	97.5	97.6	97.7
≥ 400	77.3	91.8	92.7	93.0	94.1	94.6	95.3	95.8	96.3	97.2	97.5	97.6	97.7	97.8	97.9	98.0
≥ 300	77.3	91.8	92.7	93.1	94.2	94.8	95.5	96.0	96.5	97.5	97.8	97.9	98.1	98.2	98.4	98.4
≥ 200	77.3	91.8	92.7	93.1	94.3	94.9	95.6	96.2	96.7	97.7	98.1	98.2	98.4	98.5	98.8	98.9
≥ 100	77.3	91.8	92.7	93.1	94.3	94.9	95.6	96.2	96.7	97.7	98.1	98.2	98.5	98.6	98.9	99.3
≥ 0	77.3	91.8	92.7	93.1	94.3	94.9	95.6	96.2	96.7	97.7	98.1	98.2	98.5	98.6	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS

7193

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS EST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING	28.6	43.7	44.0	44.0	44.3	44.3	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.8	44.9	45.3
≥ 20000	36.6	56.1	56.5	56.5	56.9	56.9	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.6	57.7	58.1
≥ 18000	36.9	56.5	56.8	56.8	57.2	57.2	57.6	57.6	57.6	57.6	57.6	57.6	57.6	58.0	58.1	58.4
≥ 16000	36.9	56.5	56.8	56.8	57.2	57.2	57.6	57.6	57.6	57.6	57.6	57.6	57.6	58.0	58.1	58.4
≥ 14000	37.3	56.9	57.2	57.2	57.6	57.6	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.4	58.5	58.8
≥ 12000	39.9	60.0	60.3	60.3	60.8	60.8	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.5	61.6	61.9
≥ 10000	48.0	69.1	69.5	69.5	69.9	69.9	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.6	70.8	71.1
≥ 9000	48.6	70.0	70.3	70.3	70.8	70.8	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.5	71.6	71.9
≥ 8000	50.5	72.3	72.6	72.6	73.0	73.0	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.8	73.9	74.2
≥ 7000	51.5	73.5	73.9	73.9	74.5	74.6	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.4	75.5	75.8
≥ 6000	52.3	74.8	75.2	75.2	75.8	75.9	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.7	76.8	77.1
≥ 5000	54.1	78.3	78.6	78.6	79.2	79.5	79.9	79.9	79.9	79.9	79.9	79.9	79.9	80.2	80.3	80.6
≥ 4500	54.7	79.6	79.9	79.9	80.5	80.8	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.5	81.6	81.9
≥ 4000	55.9	81.7	82.2	82.2	82.8	83.0	83.4	83.4	83.8	83.8	83.8	83.8	83.8	84.1	84.2	84.5
≥ 3500	56.3	82.5	83.0	83.0	83.7	83.9	84.5	84.5	84.8	84.8	84.8	84.8	84.8	85.2	85.3	85.6
≥ 3000	57.1	83.4	84.0	84.0	84.6	84.8	85.5	85.6	86.1	86.1	86.1	86.1	86.1	86.5	86.6	86.9
≥ 2500	57.7	84.5	85.1	85.1	85.8	86.0	86.7	86.8	87.3	87.3	87.3	87.3	87.3	87.6	87.7	88.1
≥ 2000	57.8	85.2	86.1	86.1	87.3	87.5	88.3	88.5	89.0	89.0	89.0	89.0	89.0	89.4	89.5	89.8
≥ 1800	57.8	85.3	86.3	86.3	87.7	88.0	88.8	89.0	89.6	89.6	89.6	89.6	89.6	89.9	90.0	90.3
≥ 1500	58.2	85.8	87.3	87.3	88.8	89.1	90.0	90.2	90.8	90.9	90.9	90.9	90.9	91.2	91.3	91.7
≥ 1200	58.4	86.6	88.4	88.6	90.3	90.8	91.6	92.3	92.8	92.9	92.9	92.9	92.9	93.2	93.3	93.8
≥ 1000	58.5	86.8	89.0	89.2	91.1	91.5	92.4	93.0	93.5	93.9	94.1	94.1	94.1	94.4	94.5	94.9
≥ 900	58.5	86.8	89.0	89.2	91.1	91.5	92.4	93.1	93.7	94.0	94.2	94.3	94.3	94.6	94.7	95.2
≥ 800	58.5	86.9	89.1	89.4	91.3	91.7	92.6	93.3	93.9	94.2	94.4	94.7	94.7	95.3	95.4	95.8
≥ 700	58.5	87.2	89.6	90.0	91.9	92.4	93.2	94.2	94.7	95.1	95.4	95.7	96.2	96.3	96.6	96.8
≥ 600	58.5	87.3	89.7	90.1	92.0	92.5	93.3	94.5	95.2	95.5	95.8	96.1	96.8	96.9	97.1	97.5
≥ 500	59.0	88.0	90.3	90.8	92.7	93.1	94.0	95.3	95.9	96.2	96.7	97.0	97.6	97.7	98.0	98.4
≥ 400	59.0	88.0	90.3	90.8	92.7	93.1	94.1	95.5	96.1	96.5	96.9	97.2	97.8	98.0	98.2	98.6
≥ 300	59.0	88.0	90.3	90.8	92.7	93.1	94.1	95.5	96.1	96.5	96.9	97.2	98.0	98.1	98.3	98.8
≥ 200	59.0	88.1	90.4	90.9	92.8	93.2	94.2	95.6	96.5	97.0	97.4	97.7	98.7	98.8	99.0	99.6
≥ 100	59.0	88.1	90.4	90.9	92.8	93.2	94.2	95.6	96.5	97.1	97.5	97.8	98.8	98.9	99.1	99.7
≥ 0	59.0	88.1	90.4	90.9	92.8	93.2	94.2	95.6	96.5	97.1	97.5	97.8	98.8	98.9	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

67-76

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ ¼	≥ 0
NO CEILING ≥ 20000	32.2 39.2	47.2 59.7	47.5 60.1	47.5 60.1	47.6 60.2	47.6 60.2	48.0 60.5	48.0 60.5	48.0 60.5	48.0 60.5	48.0 60.5	48.0 60.5	48.0 60.5	48.0 60.5	48.1 60.6	48.1 60.6
≥ 18000	39.2	59.7	60.1	60.1	60.2	60.2	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.6	60.6
≥ 16000	39.4	59.8	60.2	60.2	60.3	60.3	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.8	60.8
≥ 14000	39.7	60.1	60.5	60.5	60.6	60.6	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.1	61.1
≥ 12000	42.0	62.6	63.0	63.0	63.1	63.1	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.5	63.5
≥ 10000	50.3	71.0	71.4	71.4	71.5	71.5	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.9	71.9
≥ 9000	50.3	71.6	72.0	72.0	72.2	72.2	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.6	72.6
≥ 8000	52.2	73.5	74.0	74.0	74.1	74.1	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.5	74.5
≥ 7000	52.5	74.8	75.5	75.5	75.7	75.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.2	76.2
≥ 6000	53.5	76.1	76.9	76.9	77.1	77.2	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.6	77.6
≥ 5000	54.9	78.5	79.4	79.4	80.0	80.1	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.5	80.5
≥ 4500	55.5	79.0	79.9	79.9	80.5	80.6	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.1	81.1
≥ 4000	56.8	81.0	81.8	81.8	82.5	82.6	82.9	82.9	83.0	83.0	83.0	83.0	83.0	83.0	83.1	83.1
≥ 3500	57.4	82.0	82.9	82.9	83.5	83.7	84.0	84.2	84.5	84.5	84.5	84.5	84.5	84.5	84.6	84.6
≥ 3000	57.6	82.7	83.7	83.7	84.3	84.5	84.9	85.2	85.5	85.5	85.5	85.5	85.5	85.5	85.6	85.6
≥ 2500	57.7	83.5	84.5	84.5	85.2	85.4	85.8	86.0	86.3	86.3	86.3	86.3	86.3	86.3	86.5	86.5
≥ 2000	58.1	84.4	85.5	85.5	86.7	86.9	87.6	87.8	88.2	88.2	88.2	88.2	88.2	88.2	88.3	88.3
≥ 1800	58.2	84.6	85.8	85.8	87.0	87.2	88.1	88.3	88.6	88.6	88.6	88.6	88.6	88.6	88.7	88.7
≥ 1500	58.4	85.5	86.7	86.8	88.2	88.5	89.6	89.8	90.1	90.3	90.4	90.4	90.4	90.4	90.5	90.5
≥ 1200	58.6	85.7	87.2	87.3	88.8	89.1	90.4	90.6	91.0	91.3	91.4	91.4	91.4	91.4	91.5	91.5
≥ 1000	58.8	86.1	87.7	87.8	89.5	89.8	91.3	91.5	91.9	92.6	92.9	92.9	92.9	92.9	93.0	93.0
≥ 900	58.9	86.2	87.8	88.0	89.7	90.0	91.5	91.8	92.3	92.9	93.3	93.3	93.3	93.3	93.4	93.5
≥ 800	58.9	86.2	88.2	88.7	90.4	90.8	92.3	92.6	93.0	93.7	94.2	94.3	94.3	94.4	94.5	94.5
≥ 700	59.1	86.5	88.4	89.0	90.8	91.1	92.8	93.2	93.9	94.5	95.1	95.2	95.3	95.3	95.4	95.4
≥ 600	59.2	86.7	88.6	89.2	91.0	91.3	93.0	93.7	94.4	95.2	95.7	95.8	96.1	96.2	96.2	96.2
≥ 500	59.5	86.9	88.9	89.6	91.3	91.6	93.5	94.3	95.1	96.1	96.7	96.8	97.1	97.2	97.2	97.2
≥ 400	59.5	86.9	88.9	89.6	91.3	91.6	93.5	94.3	95.1	96.1	96.9	97.0	97.3	97.4	97.4	97.4
≥ 300	59.5	86.9	88.9	89.6	91.6	91.9	94.0	94.7	95.5	96.6	97.4	97.5	97.8	98.0	98.0	98.0
≥ 200	59.5	86.9	88.9	89.8	91.8	92.2	94.2	94.9	95.8	96.9	97.7	97.8	98.4	98.5	98.5	98.6
≥ 100	59.5	86.9	88.9	89.8	91.8	92.2	94.2	94.9	95.9	97.1	98.0	98.1	98.6	98.7	98.7	99.1
≥ 0	59.5	86.9	88.9	89.8	91.8	92.2	94.2	94.9	95.9	97.1	98.1	98.2	98.7	98.8	98.8	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTRGM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS T S

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/5	≥ 1/10	≥ 0
NO CEILING	35.3	43.3	43.4	43.4	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	44.1	44.1	44.2
≥ 20000	44.1	55.5	55.8	55.8	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.7	56.7	56.8
≥ 18000	44.2	55.6	55.9	55.9	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.8	56.8	56.9
≥ 16000	44.2	55.6	55.9	55.9	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.5	56.8	56.8	56.9
≥ 14000	44.4	56.0	56.3	56.3	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	57.2	57.2	57.3
≥ 12000	47.7	59.6	59.9	59.9	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.8	60.8	60.9
≥ 10000	56.3	69.1	69.5	69.5	70.0	70.0	70.0	70.1	70.1	70.1	70.1	70.1	70.1	70.4	70.4	70.5
≥ 9000	56.6	69.6	69.9	69.9	70.4	70.4	70.4	70.5	70.5	70.5	70.5	70.5	70.5	70.9	70.9	71.0
≥ 8000	58.1	71.3	71.6	71.6	72.2	72.2	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.6	72.6	72.7
≥ 7000	58.6	72.6	73.2	73.2	73.8	73.8	73.8	73.9	73.9	73.9	73.9	73.9	73.9	74.2	74.2	74.3
≥ 6000	59.2	73.7	74.4	74.4	74.9	74.9	74.9	75.1	75.1	75.1	75.1	75.1	75.1	75.4	75.4	75.5
≥ 5000	61.2	76.3	77.2	77.3	78.0	78.0	78.0	78.1	78.1	78.1	78.1	78.1	78.1	78.4	78.4	78.5
≥ 4500	62.2	77.3	78.2	78.3	78.9	78.9	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.4	79.4	79.5
≥ 4000	63.4	79.2	80.1	80.2	81.0	81.1	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.5	81.5	81.6
≥ 3500	63.8	80.1	81.0	81.1	82.0	82.4	82.5	82.6	82.6	82.6	82.6	82.6	82.6	82.9	82.9	83.0
≥ 3000	64.2	81.4	82.3	82.4	83.4	83.9	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.4	84.4	84.5
≥ 2500	64.3	82.7	83.7	83.8	84.8	85.3	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.9	85.9	86.0
≥ 2000	64.7	83.5	84.5	84.6	85.9	86.3	86.6	86.7	86.7	86.7	86.7	86.7	86.7	87.0	87.0	87.1
≥ 1800	64.9	83.9	84.8	84.9	86.2	86.7	87.1	87.3	87.3	87.3	87.3	87.3	87.3	87.6	87.6	87.7
≥ 1500	65.7	84.8	85.8	85.9	87.5	88.0	88.5	88.9	88.9	88.9	88.9	88.9	88.9	89.2	89.2	89.4
≥ 1200	66.0	85.9	87.1	87.2	89.0	89.5	90.1	90.6	90.8	90.9	91.0	91.0	91.0	91.3	91.3	91.4
≥ 1000	66.2	86.2	87.4	87.5	89.7	90.1	90.8	91.4	91.5	92.2	92.5	92.5	92.5	92.8	92.9	93.0
≥ 900	66.2	86.2	87.4	87.5	89.7	90.1	90.8	91.4	91.5	92.4	92.7	92.7	92.7	93.0	93.1	93.2
≥ 800	66.5	86.6	87.6	88.0	90.1	90.5	91.2	91.8	91.9	92.8	93.2	93.2	93.2	93.5	93.7	93.8
≥ 700	66.6	86.9	88.4	88.7	90.9	91.3	92.2	92.8	92.9	94.4	94.9	94.9	95.3	95.6	95.8	95.8
≥ 600	66.7	87.1	88.7	89.0	91.2	91.7	92.6	93.2	93.3	94.9	95.6	95.6	96.0	96.5	96.6	96.8
≥ 500	66.7	87.3	88.9	89.2	91.4	91.9	92.8	93.5	93.8	95.8	96.6	97.0	97.4	97.5	97.7	97.7
≥ 400	66.7	87.4	89.0	89.4	91.5	92.0	92.9	93.7	93.9	95.9	96.8	97.2	97.7	97.8	98.1	98.1
≥ 300	66.7	87.4	89.0	89.4	91.6	92.2	93.0	93.8	94.0	96.0	97.0	97.4	98.0	98.1	98.4	98.5
≥ 200	66.8	87.5	89.1	89.5	91.7	92.3	93.1	93.9	94.1	96.2	97.2	97.7	98.5	98.7	99.0	99.1
≥ 100	66.8	87.5	89.2	89.6	91.8	92.4	93.2	94.1	94.3	96.5	97.5	98.1	98.8	99.1	99.6	99.7
≥ 0	66.8	87.5	89.2	89.6	91.8	92.4	93.2	94.1	94.3	96.5	97.5	98.1	98.8	99.1	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

SDP
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTRUM AFB MT/GREAT FALLS

67-76

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-11
HOURS L.S.T.

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥⅓	≥⅓	≥⅓	≥⅓
NO CEILING ≥ 20000	36.8 48.9	37.7 50.0	37.8 50.2	37.8 50.2	38.2 50.5	38.3 50.6	38.3 50.8	38.3 50.8	38.4 50.9	38.6 51.1	38.6 51.1	38.6 51.1	38.8 51.3	38.8 51.3	38.8 51.3	38.8 51.3
≥ 18000	49.2	50.3	50.5	50.5	50.9	51.0	51.1	51.1	51.2	51.4	51.4	51.4	51.6	51.6	51.6	51.6
≥ 16000	49.4	50.4	50.6	50.6	51.0	51.1	51.2	51.2	51.3	51.5	51.5	51.5	51.7	51.7	51.7	51.7
≥ 14000	50.4	51.5	51.7	51.7	52.0	52.2	52.3	52.3	52.4	52.6	52.6	52.6	52.8	52.8	52.8	52.8
≥ 12000	56.6	57.6	57.8	57.8	58.2	58.3	58.4	58.4	58.5	58.7	58.7	58.7	58.9	58.9	58.9	58.9
≥ 10000	68.0	69.2	69.5	69.5	69.8	69.9	70.0	70.0	70.1	70.3	70.3	70.3	70.5	70.5	70.5	70.5
≥ 9000	69.4	70.6	70.9	70.9	71.2	71.3	71.4	71.4	71.5	71.7	71.7	71.7	71.9	71.9	71.9	71.9
≥ 8000	73.3	74.7	74.9	75.1	75.5	75.6	75.7	75.7	75.8	76.0	76.0	76.0	76.2	76.2	76.2	76.2
≥ 7000	74.3	76.5	76.7	76.8	77.4	77.5	77.7	77.7	77.8	78.1	78.1	78.1	78.3	78.3	78.3	78.3
≥ 6000	75.7	78.0	78.2	78.3	78.9	79.0	79.4	79.4	79.5	79.7	79.7	79.7	79.9	79.9	79.9	79.9
≥ 5000	77.4	80.3	80.5	80.6	81.5	81.6	82.0	82.0	82.2	82.4	82.4	82.4	82.6	82.6	82.6	82.6
≥ 4500	77.6	80.8	81.1	81.2	82.0	82.2	82.7	82.7	82.8	83.0	83.0	83.0	83.2	83.3	83.3	83.3
≥ 4000	78.9	82.7	83.1	83.3	84.2	84.3	84.9	84.9	85.1	85.3	85.3	85.4	85.6	85.7	85.7	85.7
≥ 3500	79.1	82.9	83.3	83.5	84.5	84.6	85.4	85.4	85.6	85.8	85.8	85.9	86.1	86.2	86.2	86.2
≥ 3000	79.2	83.8	84.4	84.6	85.8	86.0	86.8	86.8	87.0	87.2	87.2	87.3	87.5	87.6	87.6	87.6
≥ 2500	79.7	84.5	85.3	85.5	87.0	87.2	88.1	88.5	88.8	89.0	89.0	89.1	89.4	89.5	89.5	89.5
≥ 2000	79.7	84.6	85.5	85.7	87.3	87.5	88.5	89.0	89.5	89.8	89.8	89.9	90.1	90.2	90.2	90.2
≥ 1800	79.9	85.1	86.0	86.2	87.8	88.1	89.1	89.7	90.1	90.4	90.4	90.5	90.8	90.9	90.9	90.9
≥ 1500	80.1	85.5	86.6	86.9	88.5	88.7	90.2	91.1	91.5	91.8	91.8	92.2	92.4	92.5	92.5	92.5
≥ 1200	80.1	85.7	86.8	87.1	88.7	88.9	90.4	91.6	92.0	92.5	92.5	92.8	93.0	93.1	93.1	93.1
≥ 1000	80.1	86.2	87.3	87.6	89.2	89.7	91.2	92.4	93.0	93.5	93.8	94.1	94.3	94.4	94.4	94.4
≥ 900	80.1	86.3	87.4	87.7	89.4	89.8	91.3	92.6	93.2	93.8	94.0	94.3	94.5	94.6	94.6	94.6
≥ 800	80.2	86.7	87.7	88.1	89.8	90.2	91.7	93.0	93.8	94.3	94.6	94.9	95.2	95.3	95.3	95.3
≥ 700	80.2	86.8	87.8	88.4	90.4	90.9	92.4	93.7	94.4	95.5	95.9	96.2	96.5	96.6	96.6	96.6
≥ 600	80.2	86.9	88.0	88.5	90.5	91.0	92.6	94.0	95.1	96.5	97.0	97.3	97.5	97.6	97.6	97.6
≥ 500	80.2	87.0	88.1	88.6	90.6	91.4	93.0	94.4	95.6	97.1	97.8	98.3	98.5	98.6	98.6	98.6
≥ 400	80.2	87.0	88.1	88.6	90.6	91.4	93.0	94.4	95.6	97.1	97.8	98.3	98.7	98.8	98.8	98.8
≥ 300	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.7	99.1	99.4	99.4	99.4
≥ 200	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.8	99.2	99.7	99.7	99.7
≥ 100	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.8	99.2	99.7	99.7	99.7
≥ 0	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.8	99.2	99.7	99.7	99.7

TOTAL NUMBER OF OBSERVATIONS

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5-16	≥¼	≥0
NO CEILING	36.8	37.7	37.8	37.8	38.2	38.3	38.3	38.3	38.4	38.6	38.6	38.6	38.8	38.8	38.8	38.8
≥ 20000	48.9	50.0	50.2	50.2	50.5	50.6	50.8	50.8	50.9	51.1	51.1	51.1	51.3	51.3	51.3	51.3
IV 18000	49.2	50.3	50.5	50.5	50.9	51.0	51.1	51.1	51.2	51.4	51.4	51.4	51.6	51.6	51.6	51.6
IV 16000	49.4	50.4	50.6	50.6	51.0	51.1	51.2	51.2	51.3	51.5	51.5	51.5	51.7	51.7	51.7	51.7
IV 14000	50.4	51.5	51.7	51.7	52.0	52.2	52.3	52.3	52.4	52.6	52.6	52.6	52.8	52.8	52.8	52.8
IV 12000	56.6	57.6	57.8	57.8	58.2	58.3	58.4	58.4	58.5	58.7	58.7	58.7	58.9	58.9	58.9	58.9
IV 10000	68.0	69.2	69.5	69.5	69.8	69.9	70.0	70.0	70.1	70.3	70.3	70.3	70.5	70.5	70.5	70.5
IV 9000	69.4	70.6	70.9	70.9	71.2	71.3	71.4	71.4	71.5	71.7	71.7	71.7	71.9	71.9	71.9	71.9
IV 8000	73.3	74.7	74.9	75.1	75.5	75.6	75.7	75.7	75.8	76.0	76.0	76.0	76.2	76.2	76.2	76.2
IV 7000	74.3	76.5	76.7	76.8	77.4	77.5	77.7	77.7	77.8	78.1	78.1	78.1	78.3	78.3	78.3	78.3
IV 6000	75.7	78.0	78.2	78.3	78.9	79.0	79.4	79.4	79.5	79.7	79.7	79.7	79.9	79.9	79.9	79.9
IV 5000	77.4	80.3	80.5	80.6	81.5	81.6	82.0	82.0	82.2	82.4	82.4	82.4	82.6	82.7	82.7	82.7
IV 4500	77.6	80.8	81.1	81.2	82.0	82.2	82.7	82.7	82.8	83.0	83.0	83.0	83.2	83.3	83.3	83.3
IV 4000	78.9	82.7	83.1	83.3	84.2	84.3	84.9	84.9	85.1	85.3	85.3	85.3	85.6	85.7	85.7	85.7
IV 3500	79.1	82.9	83.3	83.5	84.5	84.6	85.4	85.4	85.6	85.8	85.8	85.9	86.1	86.2	86.2	86.2
IV 3000	79.2	83.8	84.4	84.6	85.8	86.0	86.8	86.8	87.0	87.2	87.2	87.3	87.5	87.6	87.6	87.6
IV 2500	79.7	84.5	85.3	85.5	87.0	87.2	88.1	88.5	88.8	89.0	89.0	89.1	89.4	89.5	89.5	89.5
IV 2000	79.7	84.6	85.5	85.7	87.3	87.5	88.5	89.0	89.5	89.8	89.8	89.9	90.1	90.2	90.2	90.2
IV 1800	79.9	85.1	86.0	86.2	87.8	88.1	89.1	89.7	90.1	90.4	90.4	90.5	90.8	90.9	90.9	90.9
IV 1500	80.1	85.5	86.6	86.9	88.5	88.7	90.2	91.1	91.5	91.8	91.8	92.2	92.4	92.5	92.5	92.5
IV 1200	80.1	85.7	86.8	87.1	88.7	88.9	90.4	91.6	92.0	92.5	92.5	92.8	93.0	93.1	93.1	93.1
IV 1000	80.1	86.2	87.3	87.6	89.2	89.7	91.2	92.6	93.0	93.5	93.8	94.1	94.3	94.4	94.4	94.4
IV 900	80.1	86.3	87.4	87.7	89.4	89.8	91.3	92.6	93.2	93.8	94.0	94.3	94.5	94.6	94.6	94.6
IV 800	80.2	86.7	87.7	88.1	89.8	90.2	91.7	93.0	93.8	94.3	94.6	94.9	95.2	95.3	95.3	95.3
IV 700	80.2	86.8	87.8	88.4	90.4	90.9	92.4	93.7	94.4	95.5	95.9	96.2	96.5	96.6	96.6	96.6
IV 600	80.2	86.9	88.0	88.5	90.5	91.0	92.6	94.0	95.1	96.5	97.0	97.3	97.5	97.6	97.6	97.6
IV 500	80.2	87.0	88.1	88.6	90.6	91.4	93.0	94.4	95.6	97.1	97.8	98.3	98.5	98.6	98.6	98.6
IV 400	80.2	87.0	88.1	88.6	90.6	91.4	93.0	94.4	95.6	97.1	97.8	98.3	98.5	98.6	98.6	98.6
IV 300	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.7	99.1	99.4	99.4	99.4
IV 200	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.8	99.2	99.7	99.7	99.7
IV 100	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.8	99.2	99.7	99.7	99.7
IV 0	80.2	87.0	88.2	88.7	90.8	91.5	93.2	94.7	95.9	97.4	98.2	98.8	99.2	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS TST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING	41.9	42.3	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.8	42.8	42.8	42.8	42.8	42.8	42.8
≥ 20000	51.8	52.5	53.0	53.1	53.1	53.1	53.1	53.1	53.2	53.2	53.3	53.3	53.3	53.3	53.3	53.3
≥ 18000	51.8	52.5	53.0	53.1	53.1	53.1	53.1	53.1	53.2	53.2	53.3	53.3	53.3	53.3	53.3	53.3
≥ 16000	51.8	52.5	53.0	53.1	53.1	53.1	53.1	53.1	53.2	53.2	53.3	53.3	53.3	53.3	53.3	53.3
≥ 14000	52.0	52.7	53.2	53.3	53.3	53.3	53.3	53.4	53.4	53.5	53.5	53.5	53.5	53.5	53.5	53.5
≥ 12000	57.4	58.1	58.6	58.7	58.7	58.7	58.7	58.8	58.8	58.9	58.9	58.9	58.9	58.9	58.9	58.9
≥ 10000	69.2	70.4	71.1	71.2	71.2	71.2	71.2	71.3	71.3	71.4	71.4	71.4	71.4	71.4	71.4	71.4
≥ 9000	70.9	72.0	72.7	72.8	72.8	72.8	72.8	72.9	72.9	73.0	73.0	73.0	73.0	73.0	73.0	73.0
≥ 8000	74.6	75.8	76.5	76.6	76.6	76.6	76.6	76.7	76.7	76.8	76.8	76.8	76.8	76.8	76.8	76.8
≥ 7000	75.9	77.4	78.1	78.2	78.4	78.5	78.6	78.7	78.7	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 6000	77.8	79.6	80.2	80.3	80.5	80.6	80.8	80.9	80.9	81.0	81.0	81.0	81.0	81.0	81.0	81.0
≥ 5000	79.2	81.3	81.9	82.0	82.3	82.4	82.7	83.0	83.0	83.1	83.1	83.1	83.1	83.1	83.1	83.1
≥ 4500	79.9	82.3	82.9	83.0	83.2	83.3	83.7	84.0	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.1
≥ 4000	81.2	84.2	85.1	85.3	86.0	86.2	86.8	87.2	87.4	87.5	87.5	87.7	87.7	87.7	87.7	87.7
≥ 3500	81.4	84.5	85.4	85.6	86.3	86.6	87.1	87.5	87.8	88.0	88.0	88.2	88.2	88.2	88.2	88.2
≥ 3000	81.8	85.1	85.9	86.1	87.1	87.3	87.8	88.3	88.6	88.7	88.7	88.9	88.9	88.9	88.9	88.9
≥ 2500	81.9	85.4	86.3	86.7	87.6	87.8	88.4	88.9	89.4	89.6	89.6	89.8	89.8	89.8	89.8	89.8
≥ 2000	82.3	85.9	87.1	87.5	88.6	88.8	89.4	89.9	90.3	90.5	90.5	90.8	90.8	90.8	90.8	90.8
≥ 1800	82.3	86.1	87.3	87.7	88.8	89.0	89.6	90.1	90.6	90.9	90.9	91.1	91.1	91.1	91.1	91.1
≥ 1500	82.3	86.3	87.7	88.2	89.8	90.0	90.5	91.3	91.8	92.2	92.2	92.4	92.4	92.4	92.4	92.4
≥ 1200	82.3	86.5	87.8	88.3	90.0	90.2	90.9	91.8	92.6	92.9	92.9	93.1	93.1	93.1	93.1	93.1
≥ 1000	82.4	86.7	88.2	88.6	90.5	90.8	91.6	92.8	93.8	94.4	94.5	94.7	94.9	94.9	94.9	94.9
≥ 900	82.4	86.8	88.3	88.7	90.6	90.9	91.8	93.0	94.1	94.7	94.8	95.1	95.3	95.3	95.3	95.3
≥ 800	82.5	87.1	88.6	89.0	91.0	91.2	92.3	93.8	94.9	95.6	95.7	95.9	96.1	96.1	96.1	96.1
≥ 700	82.5	87.3	88.9	89.4	91.4	91.6	92.7	94.3	95.5	96.1	96.3	96.6	96.8	96.8	96.8	96.8
≥ 600	82.6	87.4	89.0	89.5	91.5	91.7	93.0	94.7	96.2	97.0	97.4	97.6	98.0	98.0	98.0	98.0
≥ 500	82.7	87.5	89.1	89.6	91.6	91.8	93.1	94.8	96.3	97.2	97.7	98.0	98.5	98.6	98.6	98.6
≥ 400	82.7	87.5	89.1	89.6	91.6	91.8	93.1	94.9	96.5	97.3	97.8	98.1	98.7	98.8	98.8	98.8
≥ 300	82.7	87.5	89.1	89.6	91.6	91.8	93.1	94.9	96.5	97.3	97.8	98.1	98.7	98.8	98.8	98.8
≥ 200	82.7	87.5	89.1	89.6	91.6	91.8	93.1	94.9	96.5	97.3	97.8	98.1	98.7	98.8	98.8	98.8
≥ 100	82.7	87.5	89.1	89.6	91.6	91.8	93.2	95.1	96.6	97.6	98.2	98.5	99.1	99.6	99.7	99.7
≥ 0	82.7	87.5	89.1	89.6	91.6	91.8	93.2	95.1	96.6	97.6	98.2	98.5	99.1	99.6	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112

MALMSTROM AFB MT/GREAT FALLS

67-76

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS CST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING ≥ 20000	39.9 51.8	41.0 53.1	41.3 53.5	41.3 53.5	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8	41.6 53.8
≥ 18000 ≥ 16000	52.0 52.1	53.3 53.4	53.7 53.8	53.7 53.8	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1	54.0 54.1
≥ 14000 ≥ 12000	52.4 59.2	53.7 60.6	54.1 61.0	54.1 61.0	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4	54.5 61.4
≥ 10000 ≥ 9000	68.8 69.8	70.7 72.0	71.3 72.6	71.3 72.6	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9	71.6 72.9
≥ 8000 ≥ 7000	74.7 75.8	77.2 78.5	77.7 79.0	77.7 79.0	78.0 79.4	78.0 79.4	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5	78.0 79.5
≥ 6000 ≥ 5000	77.6 79.8	80.3 82.6	80.8 83.2	80.8 83.2	81.3 84.1	81.3 84.2	81.4 84.3	81.4 84.3	81.4 84.3	81.5 84.4	81.5 84.4	81.5 84.4	81.5 84.4	81.5 84.4	81.5 84.4	81.5 84.4
≥ 4500 ≥ 4000	80.1 81.6	83.0 85.3	83.7 86.1	83.7 86.2	84.5 87.0	84.6 87.1	84.7 87.2	84.7 87.2	84.7 87.2	84.8 87.3	84.8 87.3	84.8 87.3	84.8 87.3	84.8 87.3	84.8 87.3	84.8 87.3
≥ 3500 ≥ 3000	81.8 82.1	85.5 86.4	86.3 87.3	86.4 87.4	87.2 88.3	87.3 88.4	87.4 88.6	87.4 88.6	87.4 88.6	87.5 88.7	87.5 88.7	87.5 88.7	87.5 88.7	87.5 88.7	87.5 88.7	87.5 88.7
≥ 2500 ≥ 2000	82.6 83.1	87.0 87.8	87.9 88.9	88.1 89.1	89.0 90.2	89.1 90.3	89.3 90.7	89.3 90.7	89.3 90.9	89.5 91.1	89.5 91.2	89.5 91.2	89.5 91.2	89.5 91.2	89.5 91.2	89.5 91.2
≥ 1800 ≥ 1500	83.1 83.1	87.8 88.2	88.9 89.6	89.1 89.8	90.2 91.0	90.3 91.1	90.7 91.5	90.7 91.7	90.9 91.9	91.1 92.1	91.2 92.2	91.2 92.2	91.2 92.2	91.2 92.2	91.2 92.2	91.2 92.2
≥ 1200 ≥ 1000	83.3 83.5	88.5 88.7	90.1 90.4	90.3 90.7	91.5 91.9	91.7 92.1	92.1 92.9	92.4 93.4	92.7 94.0	93.0 95.0	93.1 95.3	93.1 95.3	93.1 95.5	93.1 95.5	93.1 95.5	93.1 95.5
≥ 900 ≥ 800	83.6 83.7	88.8 88.9	90.5 90.6	90.9 91.0	92.1 92.2	92.4 92.5	93.1 93.2	93.9 94.2	94.5 94.9	95.6 96.0	96.0 96.6	96.0 96.6	96.2 96.8	96.2 96.8	96.2 96.8	96.2 96.8
≥ 700 ≥ 600	83.7 83.7	88.9 89.0	90.7 90.9	91.1 91.2	92.4 92.5	92.6 92.8	93.3 93.5	94.5 94.9	95.3 95.7	96.6 97.1	97.2 97.7	97.2 97.8	97.4 98.2	97.4 98.2	97.4 98.2	97.4 98.2
≥ 500 ≥ 400	83.7 83.7	89.0 89.0	90.9 90.9	91.2 91.2	92.6 92.6	92.9 92.9	93.6 93.6	95.0 95.0	95.8 95.9	97.4 97.6	98.1 98.3	98.2 98.4	98.5 98.7	98.5 98.8	98.5 98.8	98.5 98.8
≥ 300 ≥ 200	83.7 83.7	89.1 89.1	91.0 91.0	91.3 91.3	92.7 92.7	93.0 93.0	93.8 93.8	95.2 95.2	96.0 96.0	97.7 97.8	98.5 98.7	98.6 98.8	98.9 99.2	99.0 99.4	99.0 99.4	99.0 99.4
≥ 100 ≥ 0	83.7 83.7	89.1 89.1	91.0 91.0	91.3 91.3	92.7 92.7	93.0 93.0	93.8 93.8	95.2 95.2	96.0 96.0	98.0 98.0	98.8 98.8	98.9 98.9	99.4 99.4	99.6 99.6	99.7 99.7	99.7 100.0

TOTAL NUMBER OF OBSERVATIONS

929

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

CEILING VERSUS VISIBILITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS 151

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	30.9	43.4	43.9	43.9	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2	44.2
≥ 20000	36.8	54.8	55.3	55.3	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6
≥ 18000	36.9	54.9	55.4	55.4	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
≥ 16000	37.1	55.2	55.6	55.6	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9
≥ 14000	37.7	55.8	56.2	56.2	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6
≥ 12000	40.2	58.9	59.4	59.4	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
≥ 10000	48.2	69.4	69.8	69.8	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
≥ 9000	49.0	70.9	71.3	71.3	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
≥ 8000	52.3	75.1	75.5	75.5	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
≥ 7000	52.8	75.9	76.3	76.3	76.9	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
≥ 6000	54.5	77.7	78.2	78.2	78.7	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
≥ 5000	56.6	80.8	81.3	81.3	82.0	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
≥ 4500	56.9	81.3	81.8	81.8	82.7	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9
≥ 4000	57.6	82.5	83.0	83.0	84.0	84.2	84.2	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4	84.4
≥ 3500	58.4	83.3	83.9	83.9	84.9	85.2	85.2	85.4	85.4	85.7	85.7	85.7	85.7	85.7	85.7	85.7
≥ 3000	58.8	84.4	84.9	84.9	86.2	86.8	86.9	87.1	87.1	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 2500	59.1	85.1	85.6	85.7	87.1	87.7	88.0	88.2	88.3	88.6	88.6	88.6	88.6	88.6	88.6	88.6
≥ 2000	59.9	86.5	87.0	87.2	89.2	90.1	90.6	90.9	91.0	91.5	91.5	91.5	91.5	91.5	91.5	91.5
≥ 1800	59.9	86.9	87.7	88.1	90.3	91.3	91.8	92.0	92.2	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1500	60.5	87.8	88.8	89.2	91.5	92.6	93.4	93.7	93.8	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 1200	60.6	88.3	89.5	89.9	92.3	93.3	94.2	94.5	94.6	95.4	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1000	60.6	88.5	89.7	90.1	92.8	94.0	94.8	95.3	95.4	96.3	96.5	96.5	96.5	96.5	96.5	96.5
≥ 900	60.6	88.5	89.7	90.1	93.0	94.3	95.2	95.7	95.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9
≥ 800	60.6	88.5	89.7	90.1	93.0	94.3	95.2	95.7	95.8	97.0	97.1	97.1	97.1	97.1	97.1	97.1
≥ 700	60.6	88.5	89.8	90.2	93.1	94.4	95.3	95.8	95.9	97.1	97.2	97.3	97.3	97.3	97.3	97.3
≥ 600	60.6	88.5	89.8	90.2	93.2	94.5	95.4	96.0	96.1	97.4	97.6	97.7	97.7	97.7	97.7	97.7
≥ 500	60.6	88.5	89.9	90.3	93.4	94.8	95.7	96.3	96.5	97.7	98.0	98.1	98.1	98.1	98.1	98.1
≥ 400	60.6	88.5	89.9	90.3	93.4	94.8	95.7	96.5	96.6	98.2	98.4	98.5	98.5	98.5	98.5	98.5
≥ 300	60.6	88.5	89.9	90.3	93.4	94.8	95.7	96.6	96.9	98.5	98.7	98.8	98.8	98.8	98.8	98.8
≥ 200	60.6	88.5	89.9	90.3	93.4	94.8	95.7	96.6	96.9	98.9	99.1	99.2	99.5	99.5	99.6	99.6
≥ 100	60.6	88.5	89.9	90.3	93.4	94.8	95.7	96.6	97.0	99.0	99.5	99.6	99.8	99.8	99.9	99.9
≥ 0	60.6	88.5	89.9	90.3	93.4	94.8	95.7	96.6	97.0	99.0	99.5	99.6	99.8	99.8	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

930

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTROM AFB MT/GREAT FALLS

67-76

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING	28.9	42.5	42.5	42.9	43.2	43.3	43.5	43.5	43.5	43.8	43.8	43.8	43.9	43.9	44.0	44.0
≥ 20000	37.2	55.4	55.8	55.9	56.2	56.3	56.7	56.7	56.7	56.9	56.9	56.9	57.0	57.0	57.1	57.1
≥ 18000	37.6	55.8	56.2	56.3	56.7	56.8	57.1	57.1	57.1	57.3	57.3	57.3	57.4	57.4	57.5	57.5
≥ 16000	37.7	55.9	56.3	56.5	56.8	56.9	57.2	57.2	57.2	57.4	57.4	57.4	57.5	57.5	57.6	57.6
≥ 14000	38.1	56.2	56.7	56.8	57.1	57.2	57.5	57.5	57.5	57.7	57.7	57.7	57.8	57.8	58.0	58.0
≥ 12000	40.8	59.5	59.9	60.0	60.3	60.4	60.8	60.8	60.8	61.0	61.0	61.0	61.1	61.1	61.2	61.2
≥ 10000	48.0	68.7	69.1	69.2	69.6	69.7	70.0	70.0	70.0	70.2	70.2	70.2	70.3	70.3	70.4	70.4
≥ 9000	48.8	70.0	70.4	70.5	70.9	71.0	71.3	71.3	71.3	71.5	71.5	71.5	71.6	71.6	71.7	71.7
≥ 8000	50.9	72.4	72.8	72.9	73.2	73.3	73.7	73.7	73.7	73.9	73.9	73.9	74.0	74.0	74.1	74.1
≥ 7000	51.6	73.7	74.1	74.2	74.5	74.6	74.9	74.9	74.9	75.2	75.2	75.2	75.3	75.3	75.4	75.4
≥ 6000	52.4	75.6	76.1	76.2	76.6	76.7	77.0	77.0	77.0	77.2	77.2	77.2	77.3	77.3	77.4	77.4
≥ 5000	53.5	77.7	78.3	78.4	78.9	79.0	79.4	79.4	79.4	79.6	79.6	79.6	79.7	79.7	79.8	79.8
≥ 4500	54.4	79.0	79.6	79.7	80.8	80.9	81.2	81.2	81.2	81.4	81.4	81.4	81.5	81.5	81.6	81.6
≥ 4000	56.0	81.8	82.4	82.5	83.5	83.7	84.2	84.2	84.2	84.4	84.4	84.4	84.5	84.5	84.6	84.6
≥ 3500	56.8	83.2	83.8	83.9	84.9	85.1	85.8	85.8	85.8	86.0	86.0	86.0	86.1	86.1	86.2	86.2
≥ 3000	57.4	84.3	84.9	85.2	86.3	86.5	87.2	87.2	87.2	87.4	87.4	87.4	87.7	87.7	87.8	87.8
≥ 2500	57.8	85.3	85.9	86.2	87.4	87.5	88.3	88.3	88.3	88.5	88.5	88.5	88.8	88.8	88.9	88.9
≥ 2000	58.2	86.2	87.1	87.4	88.8	89.0	89.8	89.8	89.8	90.0	90.0	90.0	90.3	90.3	90.4	90.4
≥ 1800	58.3	87.0	87.8	88.2	89.6	90.0	90.8	90.8	90.8	91.0	91.0	91.0	91.3	91.3	91.4	91.4
≥ 1500	58.5	87.7	88.7	89.0	90.5	91.0	92.0	92.0	92.0	92.3	92.3	92.3	92.6	92.6	92.7	92.7
≥ 1200	58.6	88.2	89.1	89.5	91.0	91.4	92.6	92.8	92.9	93.2	93.2	93.2	93.5	93.5	93.7	93.7
≥ 1000	58.6	88.5	89.5	89.8	91.4	91.8	93.2	93.5	93.8	94.2	94.5	94.5	94.8	94.8	94.9	94.9
≥ 900	58.6	88.5	89.5	89.8	91.4	91.8	93.3	93.7	94.0	94.5	94.8	94.8	95.2	95.2	95.3	95.3
≥ 800	58.6	88.5	89.5	89.8	91.4	91.8	93.3	93.7	94.0	94.6	94.9	95.3	95.6	95.6	95.7	95.7
≥ 700	58.6	88.6	89.7	90.0	91.7	92.3	93.9	94.2	94.5	95.2	95.5	95.8	96.1	96.1	96.2	96.2
≥ 600	58.6	88.8	89.9	90.2	92.0	92.6	94.2	94.6	94.9	95.7	96.2	96.6	97.0	97.0	97.1	97.1
≥ 500	58.7	89.0	90.1	90.4	92.3	92.8	94.4	94.8	95.2	96.1	96.7	97.0	97.4	97.4	97.5	97.5
≥ 400	58.7	89.1	90.2	90.5	92.4	92.9	94.5	95.2	95.8	96.9	97.7	98.1	98.5	98.5	98.6	98.6
≥ 300	58.7	89.1	90.2	90.5	92.4	92.9	94.5	95.2	95.9	97.0	98.0	98.3	98.7	98.7	98.8	98.8
≥ 200	58.7	89.1	90.2	90.5	92.5	93.0	94.7	95.4	96.1	97.5	98.6	98.9	99.5	99.5	99.7	99.7
≥ 100	58.7	89.1	90.2	90.5	92.5	93.1	94.8	95.5	96.2	97.6	98.8	99.1	99.7	99.7	99.9	100.0
≥ 0	58.7	89.1	90.2	90.5	92.5	93.1	94.8	95.5	96.2	97.6	98.8	99.1	99.7	99.7	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

930

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

2-112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS 1-51

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING	34.3	42.6	42.9	42.9	43.2	43.2	43.3	43.3	43.3	43.4	43.4	43.4	43.5	43.5	43.6	43.6
≥ 20000	43.3	54.6	55.0	55.0	55.3	55.4	55.5	55.5	55.5	55.6	55.6	55.6	55.7	55.8	55.8	55.8
≥ 18000	43.5	54.8	55.2	55.2	55.5	55.6	55.7	55.7	55.7	55.8	55.8	55.8	55.9	55.9	56.0	56.0
≥ 16000	43.6	54.9	55.3	55.3	55.6	55.6	55.8	55.8	55.8	55.9	55.9	55.9	56.0	56.0	56.1	56.1
≥ 14000	44.0	55.4	55.8	55.8	56.1	56.1	56.3	56.3	56.3	56.4	56.4	56.4	56.5	56.5	56.5	56.6
≥ 12000	48.0	59.6	60.0	60.0	60.3	60.3	60.5	60.5	60.5	60.6	60.6	60.6	60.7	60.7	60.8	60.8
≥ 10000	57.1	69.7	70.1	70.2	70.5	70.5	70.6	70.7	70.7	70.7	70.7	70.7	70.9	70.9	70.9	71.0
≥ 9000	57.9	70.8	71.3	71.3	71.6	71.6	71.8	71.8	71.8	71.9	71.9	71.9	72.0	72.0	72.1	72.1
≥ 8000	60.8	74.0	74.4	74.5	74.8	74.8	75.0	75.0	75.0	75.1	75.1	75.1	75.2	75.3	75.3	75.3
≥ 7000	61.6	75.4	75.8	75.9	76.3	76.4	76.6	76.6	76.6	76.7	76.7	76.7	76.8	76.9	76.9	76.9
≥ 6000	62.9	77.0	77.5	77.5	78.0	78.1	78.3	78.3	78.3	78.4	78.4	78.4	78.5	78.5	78.6	78.6
≥ 5000	64.6	79.5	80.1	80.1	80.8	80.9	81.1	81.2	81.2	81.3	81.3	81.3	81.4	81.4	81.5	81.5
≥ 4500	65.2	80.3	80.9	80.9	81.7	81.8	82.0	82.1	82.1	82.2	82.2	82.2	82.3	82.3	82.4	82.4
≥ 4000	66.4	82.3	83.0	83.1	83.9	84.0	84.3	84.4	84.5	84.6	84.6	84.6	84.8	84.8	84.9	84.9
≥ 3500	66.9	83.0	83.7	83.8	84.6	84.8	85.2	85.3	85.5	85.6	85.6	85.7	85.8	85.8	85.9	85.9
≥ 3000	67.3	83.9	84.7	84.8	85.8	86.0	86.5	86.6	86.8	86.9	86.9	86.9	87.1	87.1	87.2	87.2
≥ 2500	67.6	84.7	85.5	85.7	86.7	87.0	87.5	87.7	87.9	88.0	88.0	88.1	88.2	88.3	88.3	88.3
≥ 2000	68.0	85.5	86.5	86.7	88.0	88.3	88.9	89.2	89.4	89.6	89.6	89.6	89.8	89.8	89.9	89.9
≥ 1800	68.0	85.8	86.9	87.1	88.5	88.8	89.5	89.7	90.0	90.2	90.2	90.2	90.4	90.4	90.5	90.5
≥ 1500	68.3	86.5	87.6	87.9	89.5	89.9	90.7	91.1	91.4	91.6	91.7	91.7	91.9	91.9	92.0	92.0
≥ 1200	68.5	86.9	88.3	88.5	90.2	90.6	91.5	92.1	92.4	92.8	92.8	92.9	93.0	93.1	93.1	93.1
≥ 1000	68.6	87.2	88.7	88.9	90.8	91.2	92.3	92.9	93.4	94.0	94.2	94.3	94.5	94.6	94.6	94.6
≥ 900	68.6	87.3	88.7	89.0	90.9	91.3	92.4	93.1	93.6	94.3	94.6	94.7	94.9	94.9	95.0	95.0
≥ 800	68.7	87.4	88.9	89.2	91.2	91.6	92.7	93.5	94.0	94.8	95.1	95.3	95.5	95.6	95.6	95.6
≥ 700	68.7	87.6	89.2	89.6	91.6	92.1	93.2	94.1	94.6	95.6	95.9	96.2	96.4	96.5	96.5	96.5
≥ 600	68.8	87.7	89.3	89.7	91.7	92.3	93.5	94.5	95.1	96.2	96.6	96.9	97.2	97.3	97.3	97.4
≥ 500	68.9	87.9	89.5	90.0	92.0	92.6	93.8	94.8	95.5	96.7	97.3	97.5	97.9	98.0	98.0	98.1
≥ 400	68.9	87.9	89.6	90.0	92.0	92.6	93.8	94.9	95.7	96.9	97.6	97.8	98.3	98.3	98.4	98.5
≥ 300	68.9	87.9	89.6	90.0	92.1	92.7	93.9	95.1	95.8	97.1	97.8	98.1	98.5	98.6	98.7	98.8
≥ 200	68.9	88.0	89.6	90.1	92.2	92.7	94.0	95.1	96.0	97.4	98.1	98.4	99.0	99.1	99.2	99.3
≥ 100	68.9	88.0	89.6	90.1	92.2	92.8	94.0	95.2	96.0	97.5	98.3	98.6	99.2	99.4	99.5	99.7
≥ 0	68.9	88.0	89.6	90.1	92.2	92.8	94.0	95.2	96.0	97.5	98.3	98.6	99.2	99.4	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS

7439

USAF ETAC

FORM
JUL 64

2-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

24112 MALMSTRUM AFB MT/GREAT FALLS 67-77 ALL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING ≥ 20000	46.8 54.9	52.6 62.2	52.7 62.4	52.7 62.4	52.8 62.5	52.8 62.6	52.9 62.6	52.9 62.6	52.9 62.6	52.9 62.7	52.9 62.7	52.9 62.7	52.9 62.7	52.9 62.7	53.0 62.7	53.0 62.7
≥ 18000 ≥ 16000	55.1 55.3	62.4 62.6	62.6 62.7	62.6 62.8	62.8 62.9	62.8 62.9	62.8 63.0	62.8 63.0	62.9 63.0	62.9 63.0	62.9 63.0	62.9 63.0	62.9 63.0	62.9 63.0	62.9 63.1	63.0 63.1
≥ 14000 ≥ 12000	56.1 60.2	63.5 67.8	63.6 68.0	63.7 68.0	63.8 68.2	63.8 68.2	63.9 68.2	63.9 68.2	63.9 68.2	63.9 68.3	63.9 68.3	63.9 68.3	63.9 68.3	63.9 68.3	64.0 68.3	64.0 68.4
≥ 10000 ≥ 9000	66.3 67.2	74.6 75.7	74.8 75.9	74.9 75.9	75.0 76.1	75.0 76.1	75.1 76.1	75.1 76.2	75.1 76.2	75.1 76.2	75.1 76.2	75.1 76.2	75.1 76.2	75.2 76.2	75.2 76.3	75.2 76.3
≥ 8000 ≥ 7000	69.4 70.7	78.1 79.6	78.3 79.8	78.4 79.8	78.5 80.0	78.6 80.0	78.6 80.1	78.6 80.1	78.6 80.1	78.7 80.2	78.7 80.2	78.7 80.2	78.7 80.2	78.7 80.2	78.7 80.2	78.8 80.2
≥ 6000 ≥ 5000	72.5 74.7	81.6 84.2	81.8 84.4	81.9 84.5	82.1 84.7	82.1 84.8	82.2 84.8	82.2 84.9	82.2 84.9	82.2 84.9	82.2 84.9	82.2 84.9	82.2 84.9	82.3 85.0	82.3 85.0	82.3 85.0
≥ 4500 ≥ 4000	75.5 77.1	85.2 87.2	85.5 87.5	85.5 87.6	85.8 87.9	85.8 88.0	85.9 88.1	85.9 88.1	85.9 88.2	86.0 88.2	86.0 88.2	86.0 88.2	86.0 88.2	86.0 88.3	86.0 88.3	86.0 88.3
≥ 3500 ≥ 3000	77.8 78.4	88.1 89.0	88.5 89.5	88.6 89.6	88.9 90.0	89.0 90.1	89.1 90.2	89.2 90.3	89.2 90.4	89.3 90.4	89.3 90.5	89.3 90.5	89.3 90.5	89.3 90.5	89.4 90.5	89.4 90.6
≥ 2500 ≥ 2000	79.0 79.6	89.9 90.8	90.4 91.4	90.5 91.6	91.0 92.2	91.1 92.3	91.3 92.5	91.4 92.7	91.4 92.8	91.5 92.8	91.5 92.9	91.5 92.9	91.5 92.9	91.5 92.9	91.5 92.9	91.6 93.0
≥ 1800 ≥ 1500	79.7 80.1	91.1 91.8	91.7 92.5	91.9 92.8	92.5 93.4	92.7 93.6	92.9 93.9	93.1 94.1	93.1 94.2	93.2 94.3	93.2 94.4	93.2 94.4	93.3 94.4	93.3 94.4	93.3 94.5	93.3 94.5
≥ 1200 ≥ 1000	80.4 80.6	92.4 92.8	93.2 93.7	93.5 94.0	94.2 94.8	94.5 95.1	94.8 95.5	95.1 95.8	95.2 96.0	95.4 96.3	95.4 96.3	95.4 96.4	95.5 96.4	95.5 96.4	95.5 96.5	95.5 96.5
≥ 900 ≥ 800	80.7 80.7	93.0 93.1	93.9 94.1	94.2 94.4	95.0 95.2	95.3 95.5	95.7 96.0	96.1 96.4	96.3 96.6	96.5 96.9	96.6 97.0	96.7 97.0	96.7 97.1	96.7 97.1	96.8 97.2	96.8 97.2
≥ 700 ≥ 600	80.8 80.9	93.3 93.5	94.3 94.5	94.6 94.9	95.5 95.8	95.8 96.1	96.3 96.6	96.8 97.1	97.0 97.4	97.3 97.8	97.5 97.9	97.5 98.0	97.6 98.1	97.6 98.1	97.6 98.2	97.7 98.2
≥ 500 ≥ 400	80.9 81.0	93.6 93.6	94.7 94.8	95.0 95.1	96.0 96.1	96.4 96.5	96.9 97.1	97.5 97.6	97.7 97.9	98.2 98.4	98.4 98.7	98.5 98.8	98.6 98.9	98.6 99.0	98.7 99.0	98.7 99.1
≥ 300 ≥ 200	81.0 81.0	93.7 93.7	94.8 94.9	95.2 95.3	96.3 96.3	96.7 96.7	97.3 97.3	97.9 98.0	98.2 98.3	98.7 98.9	99.0 99.1	99.1 99.3	99.3 99.5	99.3 99.5	99.4 99.6	99.5 99.7
≥ 100 ≥ 0	81.0 81.0	93.7 93.7	94.9 94.9	95.3 95.3	96.3 96.3	96.8 96.8	97.4 97.4	98.0 98.0	98.3 98.3	98.9 98.9	99.2 99.2	99.3 99.3	99.5 99.5	99.6 99.6	99.7 99.8	99.9 100.0

TOTAL NUMBER OF OBSERVATIONS

87664

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART E PSYCHROMETRIC SUMMARIES

In this section are presented various summaries of dry- and wet-bulb temperatures, dew points, and relative humidity. The order and manner of presentations follows:

- * 1. Cumulative percentage frequency of occurrence - derived from daily observations and presented by month and annual for all years combined. These tabulations provide the cumulative percentage frequency to tenths of temperature by 5-degree Fahrenheit increments, plus mean temperature, standard deviations, and total number of observations in three separate tables as follows:
- a. Daily maximum temperatures
 - b. Daily minimum temperatures
 - c. Daily mean temperatures

NOTE: Beginning in January 1964, daily maximum and minimum temperatures are routinely selected from hourly observations recorded on surface observing forms or from automated data collections for all Air Force operated stations. For those stations observing less than 24 hours per day, and where maximum and minimum temperatures are required but not recorded, these are also selected from hourly data from as early as January 1949 and later. Please refer to notations on summary pages and Station History for further information on reporting practices of individual stations.

- * 2. Extreme values - derived from daily observations with the extreme value selected for each year and month of record available. An annual (ALL MONTHS) value is selected when all months for a year have valid extremes. Means and standard deviations are computed for months and annual when four or more values are present for any column. Two tables of daily extremes are prepared:
- a. Extreme maximum temperature
 - b. Extreme minimum temperature

NOTE: The following symbols are used in the extreme data blocks:

- (1) * indicates the extreme was selected from a month with one or more days missing.
- (2) # indicates the extreme was selected from a month in which hourly temperatures were available for less than 24 hours for at least one day in the month.

* Values for means and standard deviations do not include measurements for incomplete months.

Continued on Reverse

3. Bivariate percentage frequency distribution and computations of dry-bulb versus wet-bulb temperature. This tabulation is derived from hourly observations and is presented by month and annual, all hours and years combined. The following information is provided:

- a. The main body of the summary consists of a bivariate percentage frequency distribution of wet-bulb depression in 17 classes spread horizontally; by 2-degree intervals of dry-bulb temperature spread vertically. Also provided for each of the dry-bulb intervals is the percentage of observations with dry-bulb and wet-bulb temperature combined; and again for dry-bulb, wet-bulb, and dew-point temperatures separately. Total observations for these four items is also provided in two lines at end of each tabulation table, which may be continued on several pages.

NOTE: A percentage frequency in this table of ".0" represents one or more occurrences amounting to less than .05 percent.

- b. Statistical data for the individual elements of relative humidity, dry-bulb, wet-bulb, and dew-point temperatures are shown in the section at the bottom left of the forms. These consist of the sum of squares (ΣX^2), sums of values (ΣX), means (\bar{X}), and standard deviations (σ_x). The number of observations used in the computation for each element is also shown.
- c. At the lower right of the form are given the mean number of hours of occurrence for six ranges of dry-bulb, wet-bulb, and dew-point temperatures, and total number of hours possible in the period represented. Mean number of hours is shown to tenths and indicates mean number of hours per year in the annual summary, or mean number of hours per month in the tabulation by month.

NOTE: Wet-bulb temperature usually was not reported prior to 1946. Relative humidity usually was not reported prior to 1949, nor subsequent to June 1958; and was computed by machine methods for observations recorded during these periods. All values of dew-point temperature and relative humidity are with respect to water, unless otherwise indicated.

4. Means and standard deviations - These tabulations are derived from hourly observations and present the mean, standard deviation, and total number of observations for the eight standard 3-hour groups, by month and annual and again at the bottom for all hours combined. Records for all years combined are presented in the following three tables; DRY-BULB TEMPERATURE, WET-BULB TEMPERATURE, and DEW-POINT TEMPERATURE.
5. Cumulative percentage frequency of occurrence of relative humidity - This summary is derived from hourly observations and presents the cumulative percentage frequency of occurrence of relative humidity by increments of 10% classes, plus the mean relative humidity and total number of observations in two tables.
- a. Table 1 is prepared by month and annual, all years combined, with month being the vertical argument.
- b. Table 2 is prepared by month by standard 3-hour groups, with the hour groups being the vertical argument and a separate page for each month. All years are also combined for this summary.

DATA PROCESSING BRANCH

USAF ETAC

AIR WEATHER SERVICE/MAC

24112 MALMSTROM AFB MT/GREAT FALLS

45-77

DAILY TEMPERATURES

STATION

STATION NAME

YEARS

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

MAXIMUM

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
105								.2					.0
100							.8	.7					.1
95						.1	5.1	5.1	.4				.9
90					.2	3.1	21.1	20.7	3.4				4.1
85				.1	2.4	10.7	44.1	39.3	10.9	.4			9.1
80				1.9	8.8	24.6	67.1	58.4	23.5	3.1			15.8
75			.1	4.6	18.3	40.7	82.7	74.8	38.9	11.3	.1		22.8
70			1.1	11.6	32.6	60.0	92.1	88.1	54.2	23.1	1.2		30.5
65		.6	3.7	19.9	49.9	76.4	96.8	94.3	66.8	35.7	4.0		37.6
60	.9	2.5	9.1	32.3	65.8	88.1	98.9	97.8	78.4	49.5	11.2	1.1	44.9
55	3.7	8.6	18.9	47.6	81.5	95.9	99.9	99.4	87.5	64.7	23.2	5.5	53.3
50	10.0	20.4	30.8	63.9	90.4	99.4	100.0	100.0	92.8	77.6	38.1	16.8	61.9
45	22.5	34.5	47.5	76.6	96.2	99.9			96.1	87.0	53.9	31.7	70.6
40	38.5	53.7	62.1	86.7	98.6	100.0			98.3	91.9	68.5	50.2	79.1
35	52.3	65.0	72.3	92.2	99.5				99.8	95.5	81.2	63.5	85.2
30	60.9	73.3	80.3	97.1	99.9				100.0	98.4	87.5	72.2	89.2
25	67.5	80.5	85.9	99.0	100.0					99.2	90.8	78.5	91.8
20	74.3	84.8	90.2	99.5						99.9	92.9	84.6	93.9
15	78.8	89.5	93.0	99.7						100.0	94.9	88.0	95.3
10	82.0	92.7	95.9	100.0							96.9	90.9	96.5
5	85.2	95.9	97.1								97.9	94.3	97.5
0	88.6	98.7	98.2								99.3	96.8	98.4
-5	92.4	99.7	99.5								99.7	98.4	99.1
-10	95.8	99.9	99.7								100.0	99.4	99.6
-15	98.3	100.0	100.0									99.7	99.8
-20	94.8											99.9	100.0
-25	100.0											100.0	100.0
MEAN	29.5	37.0	41.1	53.6	64.2	71.9	82.4	80.9	69.5	58.8	44.0	35.5	55.7
S D	19.157	15.139	13.567	12.696	11.025	9.906	8.459	9.230	12.595	12.847	14.225	15.645	22.069
TOTAL OBS	992	904	992	960	992	960	992	992	960	992	960	992	11688

USAFETAC FORM 0-215 (OL 1) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

AIR WEATHER SERVICE/MAC

24112 MALMSTROM AFB MT/GREAT FALLS

STATION NAME

YEARS

DAILY TEMPERATURES

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

MINIMUM

[illegible]

USAFETAC FORM 1111 44 (1-21-5 (OL 1) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

DAILY TEMPERATURES

24112 MALMSTROM AFB MT/GREAT FALLS

45-77

YEARS

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

MEAN

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
85							.4	.2					.1
80						.2	2.9	2.1					.4
75					.1	1.9	17.8	15.9	1.5				3.1
70					1.7	13.1	47.1	38.6	9.6	.3			9.3
65				.5	9.1	30.9	74.7	66.1	23.4	3.3			17.5
60			.2	4.1	22.3	53.7	92.3	87.8	43.9	12.0	.8		26.6
55		.3	1.1	11.9	42.7	80.4	98.1	96.8	63.5	28.3	3.5	.1	35.8
50	1.3	2.2	5.8	25.5	65.6	94.4	100.0	99.6	79.7	46.2	10.9	2.4	44.7
45	5.1	8.0	14.4	43.7	85.6	99.4		100.0	90.4	62.9	22.2	9.0	53.6
40	13.9	19.9	29.8	64.7	95.3	99.8			95.1	79.7	40.2	21.3	63.5
35	26.4	37.7	50.4	81.7	98.6	100.0			98.5	89.1	56.4	35.9	73.0
30	38.7	53.2	64.5	91.2	99.6				100.0	95.0	71.0	50.0	80.4
25	49.5	62.9	74.1	96.4	99.9					98.3	82.3	62.3	85.5
20	58.7	72.0	81.5	98.7	100.0					99.2	87.9	71.7	89.2
15	65.1	79.8	86.5	99.4						99.7	91.4	79.1	91.8
10	72.9	85.7	90.9	99.6						99.9	93.7	84.3	93.9
5	77.8	90.6	94.0	99.7						100.0	96.1	89.0	95.6
0	82.6	94.1	95.9	100.0							97.5	92.9	96.9
-5	87.2	97.8	97.6								99.0	95.9	98.1
-10	90.9	99.3	98.8								99.7	98.1	98.9
-15	94.9	99.9	99.7								100.0	99.1	99.5
-20	97.8	100.0	99.9									99.6	99.8
-25	99.6		100.0									99.7	99.9
-30	100.0											99.9	100.0
-35												100.0	100.0
MEAN	20.1	27.2	31.3	42.8	53.0	60.6	68.7	67.3	57.2	47.7	34.6	26.5	44.8
S D	18.841	14.599	14.363	9.870	8.215	7.136	6.301	6.723	9.404	10.335	13.460	15.522	20.006
TOTAL OBS	992	904	992	960	992	960	992	992	960	992	960	992	11688

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES

MAXIMUM TEMPERATURE

(FROM DAILY OBSERVATIONS)

24112 Malmstrom AFB MT/GREAT FALLS 45-77

STATION

STATION NAME

YEARS

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	ALL MONTHS
45												53	
46	54	60	74	84	79	88	97	96	92	65	65	57	97
47	49	59	61	78	83	79	100	96	94	77	73	58	100
48	59	55	57	76	83	89	93	95	92	79	60	49	95
49	51	57	57	79	87	92	92	102	88	73	72	52	102
50	48	68	61	72	81	89	95	89	98	78	69	59	98
51	48	63	59	72	85	82	96	96	86	80	61	58	96
52	47	58	61	83	79	87	97	95	89	82	62	60	97
53	63	56	65	70	86	87	102	96	90	83	70	54	102
54	55	66	61	68	87	91	97	94	86	78	69	58	97
55	53	54	61	68	78	88	98	96	92	81	61	53	98
56	57	54	70	74	86	94	95	94	89	76	66	62	95
57	51	55	62	80	84	88	95	96	90	84	57	62	96
58	60	61	58	71	90	91	88	94	91	81	61	60	94
59	63	47	64	73	80	90	97	92	90	74	65	59	97
60	52	52	70	74	88	87	102	93	89	84	59	56	102
61	55	64	66	64	83	96	94	106	83	80	72	50	106
62	63	64	64	86	74	93	90	98	87	86	75	63	98
63	57	65	76	81	85	89	100	97	92	87	64	60	100
64	58	57	68	76	87	88	95	100	86	86	67	43	100
65	56	59	56	73	77	85	90	95	82	79	67	61	95
66	46	53	73	72	87	93	96	97	92	77	64	56	97
67	51	60	63	64	83	83	93	96	97	74	60	51	97
68	63	65	68	82	71	86	94	90	89	78	61	54	94
69	47	42	63	81	84	91	92	105	96	72	63	64	105
70	45	62	56	72	79	92	96	101	83	82	59	54	101
71	53	53	59	71	81	89	96	98	86	84	68	46	98
72	46	61	70	80	92	90	95	96	82	78	57	56	96
73	61	63	63	66	86	91	104	97	87	77	64	58	104
74	58	58	64	83	76	92	95	94	86	79	63	57	95
MEAN													
S. D.													
TOTAL OBS.													

NOTES * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

(AT LEAST ONE DAY LESS THAN 24 OBS)

(AT LEAST ONE DAY LESS THAN 24 DBS)

DATA PROCESSING BRANCH
USAF/ETAC/OL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES

MINIMUM TEMPERATURE

(FROM DAILY OBSERVATIONS)

24112 MALMSTRGM AFB MT/GREAT FALLS 45-77

STATION

STATION NAME

YEARS

WHOLE DEGREES FAHRENHEIT

MONTH YEAR	JAN	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG	SEP.	OCT.	NOV	DEC	ALL MONTHS
45												-5	
46	-8	4	14	22	20	39	48	45	35	14	-11	-12	-12
47	-24	-16	-26	26	26	42	50	45	27	31	-1	-3	-26
48	-7	-14	-19	15	32	46	47	50	34	25	15	-14	-19
49	-29	-14	-3	29	27	34	47	44	31	11	21	-19	-29
50	-36	2	-13	17	30	32	44	40	26	21	-11	-12	-36
51	-23	-5	-31	6	32	32	43	44	28	12	5	-23	-31
52	-24	-13	1	23	38	40	44	41	40	26	0	10	-24
53	-26	13	3	13	25	41	45	49	37	25	16	10	-26
54	-35	10	-6	-4	14	37	50	45	28	24	12	-3	-35
55	-5	-10	-17	18	30	40	41	48	30	17	-19	-22	-22
56	-20	-24	-13	21	26	45	49	41	34	15	10	-17	-24
57	-32	-15	0	18	38	43	50	44	29	12	17	17	-32
58	15	-2	-2	22	38	44	43	49	36	26	-6	-6	-6
59	-21	-15	20	17	33	43	48	47	28	18	-17	11	-21
60	-4	-15	-19	21	29	43	50	45	36	23	-3	1	-12
61	2	2	8	17	33	45	52	48	28	18	1	-22	-22
62	-30	-18	-14	22	34	33	41	45	34	27	14	-10	-30
63	-27	-14	17	21	31	37	40	44	38	20	-7	-14	-27
64	-15	4	-24	5	35	38	47	41	30	24	-14	-32	-32
65	-19	-12	-20	23	26	31	40	38	23	26	-6	-17	-20
66	-23	-9	-10	13	23	36	45	38	32	20	-7	-15	-23
67	-12	5	-14	4	18	35	40	43	39	26	3	-25	-25
68	-20	-6	16	10	23	38	35	44	33	22	-1	-44	-44
69	-34	-7	-14	20	26	29	46	40	36	18	10	-1	-34
70	-20	1	-16	13	28	32	43	41	20	16	-14	-13	-20
71	-35	-7	-7	17	26	35	39	46	25	0	-15	-23	-35
72	-33	-15	-5	14	27	35	39	47	27	-5	8	-36	-36
73	-19	-6	13	19	29	37	37	42	30	25	-14	-19	-19
74	-30	-2	1	24	31	32	47	40	26	19	11	-2	-30
MEAN													
S. D.													
TOTAL OBS.													

NOTES * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

(AT LEAST ONE DAY LESS THAN 24 OBS)

(FROM DAILY OBSERVATIONS)

YEARS

[illegible]

NOTES * (BASED ON LESS THAN FULL MONTHS)

USAF ETAC FORM 0-5 (GT-A)

(AT LEAST ONE DAY LESS THAN 24 OBS)

PSYCHROMETRIC SUMMARY

JAN

STATION

STATION NAME

YFAPS

MONTH

0000-0200

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (°)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
54/ 53					.2	.3												5	5		
52/ 51					.1													1	1		
50/ 49					.1	.1	.1											3	3		
48/ 47			.1	.4	.8	.4												16	16		
46/ 45				.8	.8	.8	.1											22	22	5	
44/ 43			.1	1.8	.4	1.2	.2											35	35	4	
42/ 41			.2	1.9	1.6	.3	.2											40	40	4	
40/ 39			.9	1.7	1.2	.2												37	37	20	
38/ 37		.2	2.0	1.2	.4													36	36	30	5
36/ 35		.5	1.1	1.6	.6													36	36	43	8
34/ 33			1.0	2.0	.4													40	40	71	10
32/ 31	.1	.3	1.3	.4	.8													27	27	43	24
30/ 29	.3	.9	3.0	1.2														50	50	43	49
28/ 27	.1	.6	2.0	.4														30	30	44	42
26/ 25	.1	1.4	2.2	.2														36	36	45	28
24/ 23	.2	1.0	1.1															21	21	44	27
22/ 21	.5	1.6	.9															28	28	44	48
20/ 19	.1	1.7	1.0															26	26	20	54
18/ 17	.6	2.4	.4															32	32	35	54
16/ 15	.6	2.5	.1															30	30	39	35
14/ 13	.2	1.7	.1															19	19	30	55
12/ 11	.6	1.7	.1															23	23	16	44
10/ 9	.2	1.6	.2															19	19	21	56
8/ 7	.4	1.4	.2															19	19	18	20
6/ 5	.2	.9																10	10	14	21
4/ 3	.2	1.2																13	13	10	19
2/ 1	.8	2.3																28	28	29	15
0/ -1	1.2	.6																17	17	21	8
-2/ -3	1.4	1.0																22	22	23	19
-4/ -5	1.4	.4																17	17	19	12
-6/ -7	1.8	.5																22	22	24	28
-8/ -9	2.8	.2																28	28	29	17
-10/ -11	2.8	.1				</															

PSYCHROMETRIC SUMMARY

68-77

YEARS

JAN
MONTH

PAGE 2 0000-0200

HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

U 26-5 (OL A)

Form

USAFETAC

PSYCHROMETRIC SUMMARY

JAN
MONTH

STATION

STATION NAME

YEARS

MONTH

PAGE 2 0300-0500

HOURS (L, S, T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

JAN
MONTH

PAGE 1 0600-0800
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
54/ 53					.1	.2												3	3					
52/ 51						.1												1	1					
50/ 49				.1	.2	.3	.1											7	7					
48/ 47			.1	.1	.4	.3	.3											12	12					
46/ 45			.3	.6	.6	.3	.1											19	19	3				
44/ 43			.5	1.5	.5	.4	.2	.1										31	31	2				
42/ 41			.9	1.4	.9	.8												36	36	12				
40/ 39			1.7	1.3	1.0	.2												39	39	22				
38/ 37			1.1	1.8	.5													32	32	31	7			
36/ 35	.1	.2	1.1	2.4	.2	.1												38	38	40	10			
34/ 33		.9	1.1	2.9	.4	.1												50	50	41	14			
32/ 31		.8	1.0	1.7	.1													33	33	56	22			
30/ 29	.2	.3	1.5	.6	.1													26	26	47	34			
28/ 27	.1	.8	2.4	.1														31	31	46	40			
26/ 25	.2	.8	2.6															33	33	40	27			
24/ 23	.4	2.4	1.8															43	43	40	25			
22/ 21	.1	1.9	.9															27	27	49	49			
20/ 19	.4	1.4	.9															25	25	33	53			
18/ 17	.5	1.2	.1															17	17	26	54			
16/ 15		2.2	.3															23	23	21	52			
14/ 13	.3	1.6	.1															19	19	23	40			
12/ 11	.4	1.6	.1															20	20	23	28			
10/ 9	1.4	1.4																26	26	27	49			
8/ 7	1.0	1.2																20	20	22	36			
6/ 5	.5	1.6																20	21	19	21			
4/ 3	.3	1.5																17	17	16	22			
2/ 1	.9	1.8																25	25	22	19			
0/ -1	1.5	.2																16	16	27	14			
-2/ -3	.5	.2																7	7	7	16			
-4/ -5	2.3	.3																24	24	23	25			
-6/ -7	2.4	.6																28	28	25	16			
-8/ -9	3.4	.2																34	34	39	17			
-10/-11	2.8	.2																28	28	26	12			
-12/-13	2.7	.1																26	26	28	23			
Element (X)	Σ X ²		Σ X		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature													
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

YEARS

0600-0800
HOURS (L. S. T.)

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JAN
STATION STATION NAME YEARS MONTH
PAGE 1 0900-1100
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
60/ 59								.1										1	1					
58/ 57							.1											1	1					
56/ 55						.1		.1	.1									3	3					
54/ 53				.1	.1	.1	.2	.1										6	6					
52/ 51			.1	.1	.4	.3		.1	.1									11	11					
50/ 49			.1	.2	.3	.3	.1	.2	.1									13	13					
48/ 47			.1	.6	.5	.1	.4	.1										18	18	2				
46/ 45			.3	.4	1.0	.5	.4	.2										27	27	8				
44/ 43			.3	1.0	.9	1.0	.2	.1										32	32	13	2			
42/ 41			.8	1.2	1.1	.4												32	32	16	1			
40/ 39		.3	.5	1.9	1.5	.4												44	44	17	5			
38/ 37		.1	.5	1.9	1.9	.2												44	44	33	8			
36/ 35		.1	1.6	2.3	.4	.3												44	44	41	11			
34/ 33	.2	.9	1.7	2.0	.5													50	50	52	22			
32/ 31	.1	.2	1.0	1.1	.8													29	29	69	18			
30/ 29	.2	.4	1.4	1.4														32	32	63	23			
28/ 27		.6	1.7	.9														30	30	30	37			
26/ 25		.6	1.8	.2														25	25	42	35			
24/ 23	.5	1.5	1.0															28	28	45	28			
22/ 21	.1	1.2	.9															20	20	39	58			
20/ 19		1.3	.2															14	14	14	65			
18/ 17	.8	1.6	.5															27	27	30	42			
16/ 15	.1	1.6	.2															18	18	20	49			
14/ 13	.2	1.3	.2															16	16	25	35			
12/ 11	.5	1.4																18	18	14	39			
10/ 9	1.2	1.0																20	20	22	57			
8/ 7	.2	1.3	.1															15	15	13	27			
6/ 5	.3	2.2																23	23	19	11			
4/ 3	.1	1.6																16	16	18	17			
2/ 1	.6	1.4																19	19	22	16			
0/ -1	2.3	.4																25	25	30	11			
-2/ -3	1.7	1.8																33	33	31	22			
-4/ -5	1.4	.4																17	17	20	13			
-6/ -7	2.4	.4																26	26	29	24			
Element (X)	Σ x'		Σ x		Σ		Σ x		No. Obs.		Mean No. of Hours with Temperature													
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total	
Dry Bulb																								
Wet Bulb																								
Dew Point																								

USAFETAC FORM 0-26-5 (OLA) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

JAN
MONTH

JURS (L, S, T.)

USAFETAC FORM 0-26-5 (OLA) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL				
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
64/ 63								.1										1	1				
62/ 61									.1									1	1				
60/ 59								.1	.1	.2								4	4				
58/ 57						.3	.5	.3		.1								12	12				
56/ 55					.4	.4	.1		.1	.3								13	13				
54/ 53					.1	.3	.2	.4	.3									13	13				
52/ 51				.1	.4	.6		.5										16	16				
50/ 49				.2	.1	.1	.1	.4	.2									11	11	2			
48/ 47			.3	.4	.6	.4	1.3	.3										32	32	8			
46/ 45			.1	.4	.8	1.7	1.1	.1										39	39	12			
44/ 43			.2	1.0	1.7	.6	.4											37	37	24			
42/ 41		.1		1.7	1.3	.8	.5											39	39	10	3		
40/ 39			1.0	1.7	2.5	1.3												60	60	23	9		
38/ 37		.1	1.4	.6	1.4	.8												40	40	39	4		
36/ 35	.3	.1	.6	2.2	1.0	.3												42	42	72	17		
34/ 33		.5	1.4	2.2	.9	.1												47	47	70	13		
32/ 31		.1	.6	1.1	.2													19	19	48	21		
30/ 29		.2	1.1	.9	.3													23	23	66	26		
28/ 27		.9	.6	.8	.1													22	22	40	45		
26/ 25		1.1	.8	.2														19	19	41	31		
24/ 23		1.2	.5															16	16	25	38		
22/ 21		.9	.4															12	12	22	52		
20/ 19		1.8	1.0															26	26	15	63		
18/ 17	.1	.8	.6															14	14	24	50		
16/ 15		1.6	.4															19	19	19	50		
14/ 13	.1	1.4	.3															17	17	18	38		
12/ 11	.8	2.4	.2															31	31	25	34		
10/ 9	.1	1.5	.1															16	16	25	50		
8/ 7		1.8	.2															19	19	15	30		
6/ 5	.3	1.6																18	18	23	17		
4/ 3	.1	2.2																21	21	19	20		
2/ 1	.4	2.3																25	25	27	13		
0/ -1	1.2	1.2																22	22	28	18		
-2/ -3	1.0	1.1																19	19	21	18		
Element (X)	Σ X ²		Σ X		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

PAGE 2

1200-1400
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
-4/ -5	1.9	1.3																30	30	28	30
-6/ -7	1.7	.4																20	20	22	19
-8/ -9	2.5	.1																24	24	26	26
-10/-11	2.0	.4																23	23	20	25
-12/-13	2.0	.1																20	20	24	31
-14/-15	.8																	7	7	7	17
-16/-17	.5																	5	5	5	18
-18/-19	.9																	8	8	8	16
-20/-21	2.3																	21	21	21	21
-22/-23	.2																	2	2	2	22
-24/-25	.3																	3	3	3	5
-26/-27	.2																	2	2	2	13
-28/-29																					18
-30/-31																					6
-32/-33																					3
TOTAL	19.8	27.1	12.0	13.2	11.8	7.8	4.3	2.4	.9	.6								930	930	930	930
																		930		930	

PSYCHROMETRIC SUMMARY

YEARS

MONTH

1500-1700

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

1500-1700
HOURS (L. S. T.)

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 STATION MALMSTROM AFB MT/GREAT FALLS 68-77 YEARS JAN MONTH
PAGE 1 1800-2000 HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
54/ 53						.2												2	2					
52/ 51					.1	.3	.2											6	6					
50/ 49				.3	.6	.5												14	14					
48/ 47				.3	.4	.2	.1	.1										11	11					
46/ 45			.2	.6	.4	.8	.6	.1										26	26	1				
44/ 43		.1	.3	.9	.1	1.1	.2											25	25	9				
42/ 41		.2	.8	2.5	1.8	.6												55	55	15				
40/ 39		.1	.3	1.9	1.5	.2	.2											40	40	24	1			
38/ 37			1.7	1.7	.4	.3												39	39	22	5			
36/ 35		.2	1.8	1.8	1.3													48	48	47	13			
34/ 33		.5	.9	2.0	.4													36	36	68	14			
32/ 31		.3	.9	1.9	.3													32	32	49	20			
30/ 29		.9	1.7	1.5														38	38	46	31			
28/ 27		1.2	1.8	1.3														40	40	50	46			
26/ 25	.1	1.3	1.5	.3														30	30	56	37			
24/ 23		1.9	1.3	.1														31	31	30	29			
22/ 21		1.3	1.2															23	23	40	54			
20/ 19	.1	1.7	.2															19	19	24	45			
18/ 17	.2	1.3	.9															22	22	29	47			
16/ 15	.3	1.5	.6															23	23	24	51			
14/ 13		1.7	.1															17	18	20	56			
12/ 11	.2	2.3	.1															24	24	22	39			
10/ 9	.1	2.2	.1															22	22	24	36			
8/ 7	.3	1.4	.1															17	17	20	27			
6/ 5	.2	1.4																15	15	20	21			
4/ 3	.6	1.8																23	24	19	27			
2/ 1	.4	1.5																18	18	21	23			
0/ -1	1.6	.2																17	17	22	14			
-2/ -3	.8	1.2																18	18	17	21			
-4/ -5	2.7	.5																30	30	31	18			
-6/ -7	2.2	.1																24	24	25	14			
-8/ -9	2.2	.1																21	21	22	21			
-10/-11	3.0																	28	28	28	24			
-12/-13	2.0																	19	19	19	28			
Element (X)	Σ X ²		Σ X		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										Total			
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							
Dry Bulb																								
Wet Bulb																								
Dew Point																								

USAFETAC JUL 64 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

JAN
MONTH

1800-2000
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

68-77

JAN
MONTH

PAGE 1 2100-2300
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL D.B./W.B.	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb		Wet Bulb	Dew Point		
54/ 53					.2	.4												6	6				
52/ 51					.1		.2											3	3				
50/ 49					.3	.9	.1											12	12				
48/ 47				.2	.1	.2	.1											6	6				
46/ 45				1.1	.6	.4	.4											24	24	2			
44/ 43			.5	1.6	.5	1.0	.4											38	38	7			
42/ 41		.1	.2	1.7	1.4	.6	.3											41	41	6			
40/ 39		.2	1.2	1.5	1.4	.1												41	41	30	1		
38/ 37		.2	1.5	1.7	.6	.2												40	40	27	3		
36/ 35		.8	1.1	1.1	.3													30	30	44	14		
34/ 33		.4	1.3	1.8	.6													39	39	68	8		
32/ 31		.5	1.1	2.3	.4													40	40	44	25		
30/ 29		.6	1.7	1.8	.1													40	40	36	37		
28/ 27	.1	1.1	2.2	.6														37	37	46	39		
26/ 25	.1	1.2	1.1	.1														23	23	65	35		
24/ 23	.2	1.2	1.4															27	27	35	44		
22/ 21	.6	1.8	1.1															33	33	37	50		
20/ 19	.2	1.8	1.0															28	28	31	39		
18/ 17	.3	2.7	.4															32	32	34	40		
16/ 15	.3	1.9	.5															26	26	37	57		
14/ 13	.3	1.2	.1															15	15	29	53		
12/ 11	.5	1.0																14	14	16	43		
10/ 9	.3	2.9																30	30	15	49		
8/ 7		1.8																17	17	24	17		
6/ 5	.2	1.1	.1															13	13	22	24		
4/ 3	.4	1.3																18	18	15	23		
2/ 1	.4	1.1																14	14	15	20		
0/ -1	1.8	.8																24	24	25	15		
-2/ -3	.9	.1																9	9	15	15		
-4/ -5	2.3	.4																27	27	26	19		
-6/ -7	1.8	.9																25	25	23	18		
-8/ -9	2.5	.1																24	24	27	19		
-10/-11	3.1																	29	29	30	25		
-12/-13	2.2																	20	20	20	19		
Element (X)	Σ x ²		Σ x		x̄		s _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total						
Dry Bulb																							
Wet Bulb																							
Dew Point																							

USAF ETAC
FORM 0-26-5 (OL A)
JUL 64
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

JAN
MONTH

HOURS (L. S. T.)

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

JAN

STATION

STATION NAME

YEARS

MONTH

PAGE 1

ALL

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31					Dry Bulb	Wet Bulb	Dew Point
64/ 63								.0													1	1		
62/ 61									.0	.0											2	2		
60/ 59								.0	.0	.0											7	7		
58/ 57						.1	.1	.1		.0											16	16		
56/ 55					.1	.1	.1	.0	.0	.1											26	26		
54/ 53				.0	.1	.3	.1	.1	.1	.0											57	57		
52/ 51			.0	.0	.2	.2	.1	.1	.0												51	51		
50/ 49			.0	.2	.3	.3	.1	.2	.1												87	87		
48/ 47			.1	.3	.4	.3	.4	.1													119	119	14	
46/ 45			.2	.6	.7	.9	.5	.1													221	221	45	
44/ 43		.0	.3	1.4	.8	1.0	.3	.0													283	283	86	2
42/ 41		.1	.6	1.7	1.3	.6	.2														323	323	82	5
40/ 39		.1	1.0	1.8	1.4	.4	.1														356	356	173	24
38/ 37		.1	1.3	1.6	.9	.3															315	315	261	40
36/ 35	.1	.3	1.1	1.7	.7	.4															297	297	408	93
34/ 33	.0	.6	1.1	2.1	.6	.0															328	328	485	118
32/ 31	.1	.3	1.1	1.4	.4																251	251	403	176
30/ 29	.1	.5	1.7	1.2	.1																274	274	395	254
28/ 27	.1	.9	1.9	.6	.0																252	252	355	337
26/ 25	.1	.9	1.6	.2																	206	206	370	272
24/ 23	.2	1.6	1.1	.0																	214	214	298	257
22/ 21	.2	1.5	.9																		196	196	295	391
20/ 19	.2	1.6	.7		.0																185	185	189	438
18/ 17	.4	1.6	.5																		183	183	232	387
16/ 15	.3	2.0	.4																		191	191	222	369
14/ 13	.3	1.4	.2																		140	142	183	351
12/ 11	.5	1.7	.1																		172	172	149	330
10/ 9	.6	1.7	.1																		177	178	184	398
8/ 7	.3	1.5	.1																		148	148	149	214
6/ 5	.3	1.5	.0																		136	139	117	160
4/ 3	.3	1.5																			134	135	135	161
2/ 1	.5	1.9																			180	180	172	130
0/ -1	1.5	.7																			164	164	211	120
-2/ -3	1.0	.8																			133	133	149	150
Element (X)	Σ x'		Σ x		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature											
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F			Total			
Dry Bulb																								
Wet Bulb																								
Dew Point																								

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

JAN
MONTH

PAGE 2

ALL
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point	7430	7430	744	
-4/-5	2.2	.6																208	208	206				
-6/-7	2.0	.5																192	192	198				
-8/-9	2.7	.2																213	213	227				
-10/-11	2.7	.1																206	207	202				
-12/-13	2.3	.0																173	173	180				
-14/-15	2.0																	150	150	150				
-16/-17	.9																	64	64	64				
-18/-19	.8																	61	61	61				
-20/-21	1.6																	120	120	120				
-22/-23	.8																	62	62	62				
-24/-25	.7																	54	54	54				
-26/-27	.5																	37	37	37				
-28/-29	.4																	28	29	28				
-30/-31	.2																	16	16	16				
-32/-33	.2																	15	16	15				
-34/-35	.1																	6	6	6				
-36/-37																								
-38/-39																								
-40/-41																								
-42/-43																								
TOTAL	27.3	26.1	16.1	14.8	8.1	4.7	2.0	.6	.3	.1											7430		7430	
Element (X)	Σ x ²		Σ x		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										Total			
Rel. Hum.	30436252		464020		62.5		14.005		7430		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		744	
Dry Bulb	5863939		136027		18.3		21.306		7440		190.5		495.1										744	
Wet Bulb	4311881		112659		15.2		18.721		7430		198.9		588.2										744	
Dew Point	2899495		50483		6.8		18.551		7430		252.6		715.8										744	

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

68-77

FEB

PAGE 1 0000-0200
HOURS (L. S. T.)

T mp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL										
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31		Dry Bulb	Wet Bulb	Dew Point								
52/ 51							.1	.1										2	2										
48/ 47				.1	.4		.1											5	5										
46/ 45				.2	.6	.4		.5										14	14										
44/ 43				.5	1.6	.7	.2											25	25										
42/ 41				.6	.7	1.2												21	21	2									
40/ 39			.8	2.7	1.3													41	41	6									
38/ 37			2.0	3.0	1.0	.5												54	54	10									
36/ 35		.1	3.1	2.6	.6	.1												55	55	35									
34/ 33		.2	1.4	3.3	.8													49	49	63	3								
32/ 31		.7	2.4	2.1	.4													47	47	75	3								
30/ 29	.1	.7	5.7	1.2	.2													67	67	51	21								
28/ 27	.7	3.2	3.1	.7														65	65	91	49								
26/ 25	1.3	2.9	1.3	.2														48	48	93	59								
24/ 23	.5	2.6	.8															33	33	60	54								
22/ 21	.7	2.3	.7															31	31	51	77								
20/ 19	1.0	2.3	.4															30	30	32	80								
18/ 17	1.0	2.4	.5															32	32	29	95								
16/ 15	1.2	1.6	.4															26	27	34	60								
14/ 13	.8	1.0																15	16	22	52								
12/ 11	1.3	1.3	.4															25	25	21	43								
10/ 9	.6	1.0																13	14	15	40								
8/ 7	1.0	1.6																21	23	20	24								
6/ 5	1.6	.7																19	19	26	16								
4/ 3	.6	1.1																14	15	12	15								
2/ 1	.5	1.8																19	20	17	26								
0/ -1	1.3	.5																15	17	18	15								
-2/ -3	1.3	.2																13	14	15	9								
-4/ -5	.7	.6																11	12	11	12								
-6/ -7	.6																	5	5	6	21								
-8/ -9	1.6	.1																14	14	14	13								
-10/-11	.2																	2	2	2	14								
-12/-13	.4																	3	3	3	8								
-14/-15																					3								
-16/-17	.1																	1	1	1	9								
Element (X)	Σ x ²			Σ x			Σ			Σ _x			No. Obs.			Mean No. of Hours with Temperature													
Rel. Hum.																≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total	
Dry Bulb																													
Wet Bulb																													
Dew Point																													

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 STATION MARMSTROM AFB MT/GREAT FALLS STATION NAME 68-77 YEARS

FEB MONTH

PAGE 1 0300-0500 HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
50/ 49						.2	.1											3	3					
48/ 47					.2													2	2					
46/ 45				.2	.8	.1		.2										12	12					
44/ 43				.8	.7	.1	.2	.1										17	17					
42/ 41			.2	1.6	1.6	1.0	.1											37	37	2				
40/ 39			.6	2.3	1.1	.7	.2											41	41	6				
38/ 37			1.8	2.8	1.4	.1												51	51	16				
36/ 35			2.4	3.6	.5													54	54	33				
34/ 33		.1	2.0	2.2	.6													41	41	54				
32/ 31	.1	.2	3.6	1.7	.4													50	50	70	10			
30/ 29		1.1	4.3	1.2														55	55	68	16			
28/ 27	.2	2.0	3.4	.7														53	53	77	45			
26/ 25	.7	3.0	1.9															47	47	68	66			
24/ 23	.7	3.6	1.9															52	52	66	47			
22/ 21	.4	3.0	.5															32	32	54	65			
20/ 19	.7	1.2	.6															21	21	41	87			
18/ 17	1.7	2.4																34	36	31	63			
16/ 15	1.2	1.8	1.0															33	33	33	86			
14/ 13	1.2	1.2	.1															21	23	25	48			
12/ 11	.8	.8	.1															15	15	24	51			
10/ 9	.6	.8																12	14	9	38			
8/ 7	.8	.8																14	15	14	27			
6/ 5	.6	1.1																14	14	12	17			
4/ 3	1.4	1.7																26	27	25	10			
2/ 1	2.2	1.6																31	33	31	18			
0/ -1	1.1	.4																12	15	19	14			
-2/ -3	.6	.4																8	9	8	26			
-4/ -5	.5	.4																7	7	7	23			
-6/ -7	1.9	.2																18	18	20	9			
-8/ -9	1.3																	11	11	11	16			
-10/-11	.2																	2	2	2	10			
-12/-13	.7																	6	6	6	5			
-14/-15																					11			
-16/-17	.1																	1	1	1	8			
Element (X)	Σ X ²			Σ X			̄ X	σ _x	No. Obs.			Mean No. of Hours with Temperature												
Rel. Hum.												≤ 0 F	≤ 32 F	≈ 67 F	≈ 73 F	≥ 80 F	≥ 93 F	Total						
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

FEB
MONTH

PAGE 2 0300-0500
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRQM AFB MT/GREAT FALLS

68-77

FEB
MONTH

PAGE 1 0600-0800
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
46/ 45					1.0		.2	.4										13	13		
44/ 43				1.4	.8	.1	.2											22	22		
42/ 41				1.1	1.4	.4	.4											27	27		
40/ 39			.6	2.8	1.3	.2	.5											45	45		
38/ 37			1.7	3.1	1.0	.2												50	50	22	
36/ 35		.4	2.9	1.9	.6	.1												49	49	26	
34/ 33		.5	2.2	3.1	.8	.1												56	56	69	
32/ 31	.1	1.0	3.7	1.7	.4													57	57	63	3
30/ 29		1.3	2.4	1.6														44	44	66	34
28/ 27	.1	1.9	3.5	.7														52	52	82	36
26/ 25	.7	2.9	1.7															44	44	60	71
24/ 23	.4	3.4	1.3															42	42	63	50
22/ 21	.2	3.1	1.4															40	40	52	55
20/ 19	.7	2.0	.7															29	29	43	69
18/ 17	.5	1.9	.5															24	24	33	76
16/ 15	1.9	1.2																26	26	37	67
14/ 13	1.0	1.6	.5															25	27	20	53
12/ 11	.6	2.4																25	26	22	55
10/ 9	1.2	.7																16	17	24	41
8/ 7	.6	1.0																13	14	10	28
6/ 5	.1	.5																5	6	10	24
4/ 3	1.3	1.3																22	27	19	17
2/ 1	2.5	1.4																33	37	30	8
0/ -1	1.6	.1																14	15	22	14
-2/ -3	1.0	.4																11	11	10	21
-4/ -5	1.0	.2																10	10	9	21
-6/ -7	1.0	.1																9	10	11	11
-8/ -9	1.8																	15	15	15	18
-10/-11	.6																	5	5	5	14
-12/-13	.6																	5	5	5	8
-14/-15																					9
-16/-17																					9
-18/-19	.1																	1	1	1	5
-20/-21																					6
Element (X)	Σ X'		Σ X		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature										
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total				
Dry Bulb																					
Wet Bulb																					
Dew Point																					

PSYCHROMETRIC SUMMARY

YEARS

FEB
MONTH

HOURS (L. S. T.)

USAFETAC
FORM
JUL 64
0.26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

FEB
MONTH

PAGE 1

0900-1100
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL																																	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point																																
58/ 57								.1		.1	.1							3	3																																		
56/ 55							.1											1	1																																		
54/ 53							.8	.2	.2	.1								12	12																																		
52/ 51					.1		.6	.1	.1									8	8																																		
50/ 49						.6	1.0											18	18																																		
48/ 47				.4	.2	1.9	.7	.4	.1									31	31																																		
46/ 45				.5	2.7	1.4	.7	.1										46	46																																		
44/ 43			.1	.7	1.7	1.7	.4											38	38	6																																	
42/ 41		.1	.2	1.3	1.7	1.7	.4											45	45	11																																	
40/ 39			.7	1.9	2.5	1.1	.4											55	55	26																																	
38/ 37			1.7	2.9	1.8	.4												56	56	57	1																																
36/ 35		.4	1.5	2.3	2.0	.2												54	54	61	1																																
34/ 33		.7	1.0	2.6	.6	.1												42	42	79	7																																
32/ 31	.1	1.4	1.7	.8	.1													35	35	81	11																																
30/ 29		1.3	2.3	1.0	.1													39	39	70	33																																
28/ 27	.2	1.9	1.5	.5														35	35	63	64																																
26/ 25	.1	1.1	.8	.4														20	20	49	71																																
24/ 23	.7	1.1	.7	.2														23	23	32	47																																
22/ 21	.6	1.7	.6	.1														25	25	21	73																																
20/ 19	.7	2.4	.4															29	29	34	74																																
18/ 17	.7	1.1	.6															20	20	28	69																																
16/ 15	1.7	1.1	.1															24	24	28	52																																
14/ 13	.7	.8	.2															15	15	20	61																																
12/ 11	.7	1.0																14	14	17	29																																
10/ 9	.8	1.7	.1															22	25	16	44																																
8/ 7	1.1	.8																16	18	23	23																																
6/ 5	.5	1.7																18	19	12	26																																
4/ 3	1.1	1.3																20	21	23	17																																
2/ 1	.8	1.3																18	18	15	19																																
0/ -1	2.3	.4																22	23	30	16																																
-2/ -3	.8	.1																8	8	10	15																																
-4/ -5	1.0																	8	8	8	12																																
-6/ -7	.4																	3	3	3	14																																
-8/ -9	1.0	.1																9	9	9	28																																
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ																										
Rel. Hum.																																																					
Dry Bulb																																																					
Wet Bulb																																																					
Dew Point																																																					
Mean No. of Hours with Temperature																																																					
		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total																																							

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2 0900-1100
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

68-77

FEB
MONTH

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
68/ 67														.1				1	1		
66/ 65												.1						1	1		
64/ 63										.1	.1							2	2		
62/ 61									.2	.4	.1							6	6		
60/ 59								.1	.1	.1	.2	.1						6	6		
58/ 57								.2	.7	.2	.4							13	13		
56/ 55							.4	1.3	.6	.6	.1							25	25		
54/ 53						.6	.6	1.1	.5									23	23		
52/ 51				.4	.8	2.1	1.5	.5										45	45		
50/ 49			.1	.6	1.1	1.2	1.3	.4										39	39		
48/ 47			.6	.6	1.3	1.5	.4	.1										38	38		
46/ 45		.1			1.2	1.2	2.0	.6										43	43	5	
44/ 43			.4	1.4	4.1	.7	.1											57	57	25	
42/ 41			1.1	2.0	1.4	.5												42	42	48	
40/ 39			.5	3.1	2.8	1.7	.5											72	72	56	
38/ 37			.8	1.5	1.1	.9												37	37	56	1
36/ 35			.6	1.8	.4	.6												28	28	71	6
34/ 33		.8	1.2	1.7														31	31	101	11
32/ 31		.8	.8	.7	.1													16	16	81	12
30/ 29		.8	1.7	.7	.4													30	30	47	28
28/ 27		.9	1.5	.6	.1													27	27	47	54
26/ 25		.9	1.4	.2														22	22	27	67
24/ 23	.1	1.1	1.1															19	19	27	67
22/ 21	.7	1.8		.1														22	22	35	65
20/ 19	.6	2.5	.2															28	28	31	82
18/ 17	.4	1.1	.1															13	14	22	83
16/ 15	.5	.8	.2															13	13	12	61
14/ 13	.5	.6	.1															10	10	12	57
12/ 11	1.3	1.1	.1															21	21	23	35
10/ 9	.4	2.6	.1															26	26	14	40
8/ 7	1.2	1.7	.1															25	25	32	37
6/ 5	.2	1.4																14	14	14	19
4/ 3		1.5																			

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (OL A)

WMA

USAFETAC

PSYCHROMETRIC SUMMARY

68-77

FEB
MONTH

PAGE 1 1500-1700
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point					
66/ 65										.1			.2					3	3						
64/ 63										.1								1	1						
62/ 61									.5	.4	.2	.1						10	10						
60/ 59										.4	.1							4	4						
58/ 57									.2	.7	.6	.2						15	15						
56/ 55							.1	.6	.1	.2	.4							12	12						
54/ 53						.1	1.2	.8	.9	.1								27	27						
52/ 51					.4	.6	1.4	1.2	.4									33	33						
50/ 49				.1	.5	1.3	2.1	.7	.4									43	43						
48/ 47				.4	.8	1.3	1.1	.6										35	35	1					
46/ 45		.1	.6	1.7	2.7	1.7	.1											58	58	6					
44/ 43			.4	1.8	3.0	1.5	.1											57	57	14					
42/ 41				1.3	1.9	2.0	.4											47	47	51					
40/ 39			.1	2.5	2.6	1.4	.6											61	61	54					
38/ 37			.9	2.4	1.7	.9	.2											52	52	68	2				
36/ 35		.1	.7	2.4	.2	.2												31	31	75	7				
34/ 33		.1	2.1	.9	.6													32	32	94	7				
32/ 31		.2	.5	1.5														19	19	77	9				
30/ 29		.4	.9	.9	.1													20	20	56	26				
28/ 27		1.4	1.3	.9	.1													32	32	43	49				
26/ 25		2.4	.8	.5														31	31	35	78				
24/ 23	.2	1.3	.4															16	16	40	74				
22/ 21	.1	2.1		.2														21	21	23	81				
20/ 19	.5	1.4		.1														17	17	30	79				
18/ 17	.5	1.3	.2															17	17	17	72				
16/ 15	.4	1.8	.1															19	20	16	66				
14/ 13	.9	1.2																18	19	25	49				
12/ 11	.5	1.1	.2															15	16	17	48				
10/ 9	.8	1.8	.1															23	23	17	36				
8/ 7	.4	1.8																18	18	16	33				
6/ 5		1.8																15	15	16	19				
4/ 3		2.0																17	17	15	19				
2/ 1		.8																7	7	15	9				
0/ -1	.5	.2																6	6	9	16				
Element (X)	Σ x²		Σ x		x̄		σ²		No. Obs.		Mean No. of Hours with Temperature														
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total		
Dry Bulb																									
Wet Bulb																									
Dew Point																									

USAFETAC FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

FEB
MONTH

1500-1700
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1800-2000

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb		Wet Bulb	Dew Point	
56/ 55								.1		.1								2	2			
54/ 53							.1											1	1			
52/ 51							.2	.4										5	5			
50/ 49						.2	.4	.4	.1									9	9			
48/ 47				.2	.1	.6	.6	.1										14	14			
46/ 45				.5	1.5	1.9	.5	.4										40	40			
44/ 43			.1	.5	2.4	.6	.4	.1										34	34			
42/ 41			.2	1.8	1.4	1.1	.4											41	41	11		
40/ 39			.8	2.7	2.4	.7												56	56	8		
38/ 37		.1	1.1	3.6	2.4	.2												62	62	41		
36/ 35		.5	1.4	4.1	1.3													61	61	62	1	
34/ 33		.1	3.8	3.8	.7	.2												73	73	62	8	
32/ 31		.8	2.6	1.7	.5													47	47	95	6	
30/ 29	.4	1.5	2.6	1.2	.1													49	49	105	22	
28/ 27	.5	1.7	1.8	.7														39	39	77	55	
26/ 25	.6	1.9	.8															28	28	54	82	
24/ 23	.1	2.3	.8															27	27	43	84	
22/ 21	.4	.9	1.0															27	27	34	69	
20/ 19	.5	2.4	.2															26	26	29	66	
18/ 17	1.2	1.3																21	21	32	83	
16/ 15	.5	1.0																12	12	17	77	
14/ 13	.8	.5	.1															12	12	12	39	
12/ 11	1.1	1.4																21	21	15	26	
10/ 9	.7	1.1																15	18	22	44	
8/ 7	1.0	1.3																19	23	14	28	
6/ 5	.8	2.5																28	29	19	18	
4/ 3	.5	2.3																23	25	21	18	
2/ 1	.1	1.8																16	16	25	11	
0/ -1	.6	.6																10	10	16	17	
-2/ -3	.1	.5																5	5	9	18	
-4/ -5																					12	
-6/ -7		.2																2	2	1	15	
-8/ -9	.4																	3	3	4	9	
-10/ -11	.7																	6	6	6	8	
Element (X)	Σ X ²		Σ X		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature										Total	
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F						
Dry Bulb																						
Wet Bulb																						
Dew Point																						

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2

1800-2000
HOURS (L. S. T.)

[illegible]

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

FEB

STATION

STATION NAME

YEARS

MONTH

PAGE 1

2100-2300

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31		Dry Bulb	Wet Bulb	Dew Point
54/ 53							.2											2	2		
52/ 51							.1											1	1		
50/ 49					.1	.1												2	2		
48/ 47				.1	.2	.1												4	4		
46/ 45					.2	.7	.1	.1										10	10		
44/ 43				1.1	1.3	1.0		.2										30	30		
42/ 41				1.7	.8	.7	.4											30	30	7	
40/ 39		.1	.7	2.8	1.2	.6												45	45	2	
38/ 37			2.0	3.8	1.2	.1												60	60	14	
36/ 35		.1	1.6	3.1	.7													46	46	48	1
34/ 33	.1	.8	2.6	3.3	.7													64	64	57	3
32/ 31		1.2	5.4	1.3	.1													67	67	84	7
30/ 29	.1	1.4	3.7	.7	.2													52	52	76	20
28/ 27	1.0	3.3	3.7	.6														72	72	105	62
26/ 25	.8	2.0	1.0	.1														33	33	72	66
24/ 23	.6	2.8	.5															32	32	59	66
22/ 21	.5	1.9	.7															26	26	30	91
20/ 19	1.2	2.4	.5															34	34	35	80
18/ 17	.6	2.4	.2															27	27	30	69
16/ 15	.7	.7																12	12	25	69
14/ 13	1.0	1.4																20	20	17	44
12/ 11	1.3	.4																14	14	20	30
10/ 9	.1	1.4																13	13	4	41
8/ 7	1.4	1.3	.4															26	29	24	19
6/ 5	1.7	1.9																30	31	34	13
4/ 3	.1	1.7																15	16	15	20
2/ 1	.7	1.6																19	25	18	19
0/ -1	1.8																	15	16	25	18
-2/ -3	1.0	.7																14	15	11	15
-4/ -5	.1																	1	1	4	10
-6/ -7	.4																	3	3	3	21
-8/ -9	.5																	4	4	4	16
-10/-11	.6																	5	5	5	10
-12/-13	.2																	2	2	2	6
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature										
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total				
Dry Bulb																					
Wet Bulb																					
Dew Point																					

PSYCHROMETRIC SUMMARY

FEB

STATION

STATION NAME

YEARS

MONTH

2100-2300

HOURS (L, S, T, I)

[illegible]

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77

YEARS

FEB
MONTH

PAGE 2

ALL
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (OLA)
MAY 44 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

MAR
MONTA

0000-0200

HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

PAGE 1 0300-0500
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL D.B./W.B.	TOTAL			
	0	1 - 2	3 - 4	5 - 6	7	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point			
54/ 53							.2											2	2				
52/ 51							.1											1	1				
50/ 49						.1												2	2				
48/ 47				.2	.8	.3												12	12				
46/ 45			.3	.4	1.0	.5	.2											23	23				
44/ 43				1.0	1.1	.8	.2											28	28				
42/ 41			.4	1.1	1.2	.4	.1											30	30	9			
40/ 39		.1	1.1	2.3	1.6	.8												54	54	18			
38/ 37		.1	1.3	2.2	1.1	.3												46	46	29			
36/ 35		.2	1.3	3.5	.8	.4												58	58	35			
34/ 33		1.3	2.6	2.9	.5													68	68	67			
32/ 31	.4	2.3	2.7	1.8	.1													68	68	69			
30/ 29	.1	2.2	2.6	1.4														58	58	104			
28/ 27	.5	2.3	3.7	.6														66	66	87			
26/ 25	1.1	4.0	2.2															67	67	77			
24/ 23	1.7	4.0	.9															61	61	105			
22/ 21	1.5	3.8	.8															56	56	62			
20/ 19	1.6	3.0	.2															45	45	57			
18/ 17	1.0	2.6	.1															34	34	40			
16/ 15	.2	1.1	.1															13	13	25			
14/ 13	.6	1.1																16	16	19			
12/ 11	.9	1.0	.1															18	18	15			
10/ 9	.8	1.1	.2															19	19	20			
8/ 7	1.1	.6																16	16	19			
6/ 5	.8	.4																11	11	15			
4/ 3	.5	.1																6	6	5			
2/ 1	.9	.5																13	13	11			
0/ -1	1.3	.2																15	15	15			
-2/ -3	.3	.3																6	6	9			
-4/ -5	.1																	1	1	1			
-6/ -7	.2	.1																3	3	3			
-8/ -9																				12			
-10/-11	.2																	2	2	2			
-12/-13	.4																	4	4	4			
Element (X)	Σ X ²		Σ X		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77

YFARS

MAR
MONTH

PAGE 2

0300-0500

HOURS (L, S, T.)

[illegible]

USAFETAC FORM 0-26-5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

PAGE 1

0600-0800

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL D.B./W.B.	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb		Wet Bulb	Dew Point		
54/ 53						.1	.1											2	2				
52/ 51							.3											3	3				
50/ 49					.3	.1	.1											5	5				
48/ 47				.1	.2	.5	.1											9	9				
46/ 45				.9	2.2	.9	.2											38	38				
44/ 43				1.0	1.5	.2												26	26	2			
42/ 41			.3	2.6	1.3	.3	.1											43	43	5			
40/ 39			.5	2.3	.8	.5	.1											39	39	25			
38/ 37			1.5	2.3	.6	.3												44	44	38			
36/ 35		.6	1.5	2.2	.8													47	47	51	4		
34/ 33	.1	1.0	2.9	2.8	1.0													72	72	59	8		
32/ 31	.6	2.0	4.1	1.9	.4													85	85	66	20		
30/ 29	.1	2.2	3.4	1.1	.1													64	64	87	48		
28/ 27	.6	2.7	3.6	.5														71	71	105	59		
26/ 25	.9	4.1	1.2															57	57	88	75		
24/ 23	.8	3.3	1.0															47	47	81	88		
22/ 21	1.3	2.5	.5															40	40	58	89		
20/ 19	2.4	2.9	.1															50	50	57	95		
18/ 17	.9	2.3																29	29	31	98		
16/ 15	.5	.9	.1															14	14	27	74		
14/ 13	.4	1.3	.4															20	20	15	36		
12/ 11	1.2	1.1																21	21	24	44		
10/ 9	1.0	1.4																22	22	20	53		
8/ 7	1.0	.3																12	12	18	24		
6/ 5	.4	.3																7	7	9	16		
4/ 3	.9	.2																10	10	10	17		
2/ 1	.6	.4																10	10	7	15		
0/ -1	.9																	8	8	12	13		
-2/ -3	.6	.4																10	10	7	6		
-4/ -5	.3																	3	3	6	9		
-6/ -7	.6	.1																7	7	7	3		
-8/ -9	.1																	1	1	1	8		
-10/-11	.4																	4	4	4	1		
-12/-13	.2																	2	2	2	7		
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≤ 67 F		≤ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

YEARS

MAR
MONTH

0600-0800

HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAR
MONTH

PAGE 1 0900-1100
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
66/ 65												.1						1	1					
64/ 63								.1	.4	.1								6	6					
62/ 61								.2			.2							4	4					
60/ 59							.1	.1	.3	.1								6	6					
58/ 57						.2	.4	1.0	.6	.2								23	23					
56/ 55						.2	.6	1.1										18	18					
54/ 53					.1	.6	1.6	.4	.1	.2								29	29					
52/ 51					.2		1.5	.5										21	21					
50/ 49				.1	.2	1.2	.8	.2	.1									24	24	1				
48/ 47				.2	.8	3.0	1.1	.3										50	50	11				
46/ 45		.1	.2		2.0	1.8	1.6	.1										55	55	10				
44/ 43				1.0	1.6	1.9	.8											49	49	35				
42/ 41		.1	.4	1.5	1.9	2.4	.3											62	62	43	1			
40/ 39			.2	2.2	2.3	2.6	.2											69	69	40	2			
38/ 37	.1		.7	1.6	2.4													53	53	72	3			
36/ 35	.1	.2	1.3	2.2	2.0	.2												56	56	61	10			
34/ 33	.1	1.3	2.0	1.7	.9	.2												58	58	70	13			
32/ 31	.1	1.3	1.4	1.1	.2													38	38	105	29			
30/ 29	.2	1.5	1.7	.2														36	36	98	48			
28/ 27	.1	1.7	1.2	.5														33	33	71	92			
26/ 25		2.0	.8	.1														27	27	43	74			
24/ 23	1.0	1.9	.3															30	30	44	80			
22/ 21	.4	1.4	.9															25	25	32	98			
20/ 19	.5	1.7	.8															28	28	19	92			
18/ 17	.2	1.0	.3															14	14	27	66			
16/ 15		.6	.2															8	8	13	61			
14/ 13	.5	.8																12	12	16	49			
12/ 11	.9	1.8																25	25	24	47			
10/ 9	1.2	1.2																22	22	21	38			
8/ 7	.5	.2																7	7	11	38			
6/ 5	.6																	6	6	5	25			
4/ 3	.4	.4																8	8	5	18			
2/ 1	.3	.3																6	6	6	9			
0/ -1	.4																	4	4	7	5			
Element (X)	ΣX^2		ΣX		\bar{X}		σ^2		No. Obs.		Mean No. of Hours with Temperature							Total						
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							
Dry Bulb																								
Wet Bulb																								
Dew Point																								

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																							TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point						
70/ 69														.1				1	1								
68/ 67											.3	.1	.2					6	6								
66/ 65									.1	.4	.1	.1						7	7								
64/ 63									.8	.9	.1							16	16								
62/ 61								.5	1.1	.2	.4							21	21								
60/ 59							.1	.1	1.7	.5	.2							25	25								
58/ 57						.2		.6	1.4	.5	.2							28	28								
56/ 55						.1	.3	2.2	1.1	.4								38	38								
54/ 53						.1	1.6	2.3	.4	.2	.1							44	44								
52/ 51			.1			.4	1.1	1.4	.4	.1								33	33								
50/ 49				.1	.2	.4	1.8	1.3	.1									37	37	7							
48/ 47			.1	.1	.9	1.5	2.8	1.0										59	59	28							
46/ 45				.1	1.7	2.6	3.4	1.3										85	85	17							
44/ 43		.1	.1	.9	.5	1.6	3.0	.2										60	60	48	1						
42/ 41			.1	.4	1.0	2.2	1.2	.2										47	47	56	2						
40/ 39		.1		1.1	.6	1.5	.2											33	33	72							
38/ 37		.2	.9	1.4	.4	.9												35	35	79	5						
36/ 35		.4	1.1	1.6	1.2	.3												43	43	88	4						
34/ 33		.9	1.3	.3	1.2	.3												37	37	84	17						
32/ 31	.2	1.3	1.5	.3	.4													35	35	90	27						
30/ 29	.1	.6	1.3	.9	.3													30	30	80	47						
28/ 27		1.7	1.4	.8														36	36	38	67						
26/ 25	.2	1.7	1.0	.1														28	28	47	83						
24/ 23	.2	1.7	.4															22	22	41	89						
22/ 21		.5	.8															12	12	27	75						
20/ 19	.5	1.4	.2															20	20	20	81						
18/ 17	.3	.9	.1															12	12	21	86						
16/ 15	.3	.9	.2															13	13	11	68						
14/ 13	.4	1.9																22	22	19	66						
12/ 11	.2	1.2																13	13	18	67						
10/ 9	.3	1.1																13	13	15	41						
8/ 7	.1	.2																3	3	7	27						
6/ 5	.2	.1																3	3	3	30						
4/ 3		.2																2	2	1	19						
Element (X)	Σ x²		Σ x		Σ		Σ x		No. Obs.		Mean No. of Hours with Temperature																
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total										
Dry Bulb																											
Wet Bulb																											
Dew Point																											

PSYCHROMETRIC SUMMARY

YFARS

MAR
MONTH

PAGE 2 1200-1400
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 YEARS MAR
STATION STATION NAME MONTH

PAGE 1 1500-1700
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL				
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point			
70/ 69												.4		.2				6	6				
68/ 67											.4		.1					5	5				
66/ 65										.4	.1							5	5				
64/ 63									.9	1.4	.4	.2						27	27				
62/ 61								.2	.4	1.1								16	16				
60/ 59								.5	.9	.5	.3							21	21				
58/ 57							.1	.8	1.5	1.2	.1							34	34				
56/ 55						.1	.8	1.4	1.4	.2								36	36				
54/ 53					.1	.2	.5	1.2	.5	.2								26	26				
52/ 51				.1	.1	.6	1.3	2.3	.6									47	47				
50/ 49					.2	1.0	2.3	1.8	.5									54	54	8			
48/ 47				.3	.8	1.7	1.6	2.3	.2									64	64	19			
46/ 45		.1		.5	1.1	3.0	2.6	1.3										80	80	30			
44/ 43		.1		.9	1.2	1.0	2.0	.3										51	51	47			
42/ 41			.1	.8	1.4	1.9	1.6	.1										55	55	52			
40/ 39			.2	.8	.8	1.4	.5											34	34	82			
38/ 37		.1	.4	1.1	1.4	.9	.2											38	38	77			
36/ 35		.4	1.2	.5	.8	.4	.2											33	33	105			
34/ 33		.8	1.1	1.4	1.0	.1	.2											42	42	70			
32/ 31		.2	1.5	1.1	.2													28	28	86			
30/ 29		1.2	1.3	.9	.1													32	32	68			
28/ 27		1.0	1.9	.4														31	31	53			
26/ 25	.2	2.6	.9	.3														37	37	50			
24/ 23	.1	1.0	.2	.2														14	14	45			
22/ 21	.3	1.6	.8															25	25	25			
20/ 19		.9	.1															9	9	26			
18/ 17	.3	.8																10	10	10			
16/ 15	.3	1.6																18	18	15			
14/ 13	.8	.5	.5															17	17	20			
12/ 11	.1	.8	.1															9	9	10			
10/ 9	.2	.8																9	9	11			
8/ 7		.4																4	4	8			
6/ 5		.1																1	1	1			
4/ 3		.2																2	2	1			
Element (X)	Σ X ²		Σ X		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature							Total					
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2 1500-1700
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26-5 (OLA)

USAFETAC

PSYCHROMETRIC SUMMARY

68-77

MAR
MONTM

PAGE 1 1800-2000
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
66/ 65												.1						1	1					
64/ 63												.3						3	3					
62/ 61												.1	.1					2	2					
60/ 59												.5	.1					6	6					
58/ 57								.1	.6	.3	.2							12	12					
56/ 55							.6	.4	.5	.1								16	16					
54/ 53					.1	.1	.9	.8	.1									18	18					
52/ 51					.8	1.5	.3											24	24					
50/ 49				.5	.6	.9	.1	.1										21	21					
48/ 47			.1	1.4	1.5	1.4	.3											44	44	2				
46/ 45			.1	1.4	2.5	1.3												49	49	7				
44/ 43		.1	.4	.9	2.2	2.2	1.4	.1										67	67	24				
42/ 41		.2	.4	1.0	2.4	1.9	.8											62	62	35				
40/ 39			1.3	2.3	3.2	1.3	.2											77	77	47	2			
38/ 37		.1	1.0	2.0	2.0	.9	.1											57	57	72	2			
36/ 35		.1	1.3	1.8	1.9	.9												56	56	73	6			
34/ 33		.5	1.7	1.3	1.6	.1												49	49	89	13			
32/ 31	.1	.9	1.7	2.0	.6													50	50	98	15			
30/ 29		1.4	2.5	.3	.1													40	40	79	50			
28/ 27		1.8	1.9	.6	.2													43	43	91	73			
26/ 25	.9	2.7	1.5	.2														49	49	66	75			
24/ 23	.4	2.0	.8															30	30	52	82			
22/ 21	.4	2.5	.5															32	32	49	95			
20/ 19	.1	1.8	.1															19	19	27	82			
18/ 17	.1	1.5	.1															16	16	21	95			
16/ 15	.4	1.4																17	17	19	81			
14/ 13	1.0	.6																15	15	23	64			
12/ 11	.5	.1																6	6	7	61			
10/ 9	.3	.9	.1															12	12	5	51			
8/ 7	.4	.4																8	8	12	25			
6/ 5	.4	.1																5	5	7	13			
4/ 3	.2	.3																5	5	4	10			
2/ 1	.1	.2																						

0.26-5 (OLA)

USAFETAC

PSYCHROMETRIC SUMMARY

68-77

MAR
MONTH

PAGE 2 1800-2000
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26-5 (01-A)

FORM

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

PAGE 1 2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
58/ 57								.1	.1									2	2			
56/ 55						.1	.4											5	5			
54/ 53					.1	.3	1.0	.1										3	3			
52/ 51					.1	.3	1.0	.2										15	15			
50/ 49					.4	.3	.5	.1										13	13			
48/ 47					.4	1.1	.2											16	16			
46/ 45				.3	1.4	1.3		.1										29	29	3		
44/ 43			.1	1.0	2.4	.8												39	39	7		
42/ 41			.2	1.2	2.0	.5												37	37	17		
40/ 39			.6	1.8	3.0	.5												56	56	23		
38/ 37		.4	1.1	3.2	1.9	.5												67	67	46	2	
36/ 35	.1	.8	1.8	4.2	1.8	.1												82	82	53	8	
34/ 33		1.1	2.0	2.6	.8													60	60	68	10	
32/ 31	.2	1.3	2.2	2.7	.1													60	60	96	13	
30/ 29	.3	2.2	3.1	1.6	.1													68	68	99	36	
28/ 27	.8	2.0	3.3	1.3														69	69	99	76	
26/ 25	.6	2.3	1.8	.2														46	46	76	86	
24/ 23	1.6	3.2	.9															53	53	84	76	
22/ 21	.4	3.9	.1															41	41	59	89	
20/ 19	.5	3.0																33	33	46	103	
18/ 17	.5	1.3																17	17	29	90	
16/ 15	.4	1.7	.2															22	22	18	95	
14/ 13	.4	2.3	.1															26	26	22	59	
12/ 11	.3	.5																8	8	19	39	
10/ 9	.9	.3																11	11	12	47	
8/ 7	.6	.2																8	8	10	34	
6/ 5	.8																	7	7	7	9	
4/ 3	.3	.1																4	4	4	11	
2/ 1	.1	.4																5	5	1	10	
0/ -1	1.0	.2																11	11	13	4	
-2/ -3	.3	.1																4	4	5	4	
-4/ -5	.1	.2																3	3	3	3	
-6/ -7	.1																	1	1	2	4	
-8/ -9	.2																	2	2	2	5	
Element (X)	Σ X ²		Σ X		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										Total	
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F						
Dry Bulb																						
Wet Bulb																						
Dew Point																						

PSYCHROMETRIC SUMMARY

YFARS

MAR
MONTH

PAGE 2 2100-2300
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

MONTH

ALL

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

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MAR

PAGE 2

MONTH

ALL

HOURS (L, S, T.)

[illegible]

PSYCHROMETRIC SUMMARY

.8-77

APR

PAGE 1 0000-0200
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11	12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb		Wet Bulb	Dew Point	
62/ 61									.1										1	1			
60/ 59							.1												1	1			
58/ 57							.1	.1	.3										5	5			
56/ 55					.1	.4	.3	.3											11	11			
54/ 53						.6	.4	.3	.1										13	13			
52/ 51				.1	.3	.6	.8												16	16			
50/ 49				.2	.9	1.4	.4	.1											28	28	2		
48/ 47			.2	.3	1.3	.6	.8												29	29	3		
46/ 45		.1	.1	.4	1.8	1.8	.4												42	42	11		
44/ 43		.2	1.0	2.2	1.6	.4													49	49	1		
42/ 41		.4	.4	2.7	2.3	.1													54	54	6		
40/ 39		.7	2.4	3.0	2.8	.1													81	81	3		
38/ 37	.1	.9	3.7	2.9	1.9	.2													87	87	14		
36/ 35	.3	2.2	2.7	2.8	.9	.1													81	81	29		
34/ 33	1.0	3.4	2.8	3.3	.3														98	98	25		
32/ 31	1.1	4.4	2.2	1.0	.2														81	81	69		
30/ 29	.7	1.7	1.8	1.0															46	46	115		
28/ 27	.6	1.4	2.6	1.4															54	54	115		
26/ 25	.7	2.2	1.8	.1															43	43	102		
24/ 23	.6	1.2	.1																17	17	49		
22/ 21	.2	1.0	.1																12	12	92		
20/ 19	.2	.9	.2																12	12	68		
18/ 17	.8	.8	.1																15	15	69		
16/ 15	.4	.3																	7	7	44		
14/ 13		.2																	2	2	27		
12/ 11	.3																		3	3	19		
10/ 9	.3																		3	3	30		
8/ 7	.2																		2	2	8		
6/ 5	.2	.1																	3	3	6		
4/ 3	.1																		1	1	4		
2/ 1																					1		
0/ -1																					1		
-6/ -7	.2																		2	2	2		
-8/ -9	.1																		1	1	1		
Element (X)	Σ X ²			Σ X			X̄			σ _x			No. Obs.			Mean No. of Hours with Temperature							
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total	
Dry Bulb																							
Wet Bulb																							
Dew Point																							

USAFETAC FORM 0-26.5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YFARS

PAGE 2 0000-0200
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE JUN 64

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

APR

PAGE 1 0300-0500

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL				
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
60/ 59								.1										1	1					
58/ 57							.1											1	1					
56/ 55							.1	.1										2	2					
54/ 53							.3	.1	.1									5	5					
52/ 51						.2	.4	.4										10	10					
50/ 49				.1	.8	.7	.3											17	17					
48/ 47			.1	.8	.8	.9	.4											27	27	1				
46/ 45			.2	.3	2.0	.9	.3											41	41	3				
44/ 43		.1	.6	1.2	1.3	.7												35	35	10				
42/ 41	.1	.8	.6	2.0	1.8													47	47	27	2			
40/ 39		.6	2.1	3.0	1.7	.3												69	69	40	5			
38/ 37	.6	1.0	2.1	2.8	1.1													68	68	59	10			
36/ 35	.3	2.9	3.2	4.2	.3													99	99	85	22			
34/ 33	.1	3.4	5.2	3.3	.6													114	114	104	26			
32/ 31	.8	5.7	2.6	1.6														95	95	117	54			
30/ 29	1.9	2.2	2.0	.8	.2													64	64	167	96			
28/ 27	.7	2.8	3.0	.6														63	63	63	127			
26/ 25	.1	2.2	1.1															31	31	51	111			
24/ 23	.4	2.4	.3															29	29	60	66			
22/ 21	.1	1.0	.2															12	12	31	84			
20/ 19	.9	1.2	.1															20	20	22	77			
18/ 17	.7	.7	.1															13	13	16	64			
16/ 15	.2	.6																7	7	12	45			
14/ 13	.3	.9																11	11	10	26			
12/ 11	.4	.2																6	6	8	30			
10/ 9	.3																	3	3	4	28			
8/ 7	.6																	5	5	5	10			
6/ 5	.2																	2	2	2	9			
4/ 3																					5			
0/ -1	.1																	1	1	1				
-2/ -3	.1																	1	1	1				
-4/ -5																					1			
-6/ -7																					1			
-8/ -9	.1																	1	1	1				
Element (X)	Σ X ²		Σ X		X		σ _x		No. Obs.		Mean No. of Hours with Temperature													
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total	
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

68-77

APR
MONTH

PAGE 2 0300-0500
HOURS (L. S. T.)

[illegible]

USAFETAC
FORM 0-26-5 (OLA)
JUL 64
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

68-77

YEARS

APR

MONTH

PAGE 1 0600-0800

HOURS (L. S. T.)

FORM 0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

YFAPS

MONTH

0600-0800

HOURS (L. S. T.)

USAFETAC FORM 0-26-5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24122 MALMSTROM AFB MT/GREAT FALLS

68-77

APR

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0900-1100

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
80/ 79																.1		1	1					
78/ 77													.1					1	1					
76/ 75													.1					1	1					
74/ 73											.1	.3	.1					5	5					
72/ 71												.1	.2					3	3					
70/ 69											.4	.2	.1					7	7					
68/ 67									.1		.7	.1						8	8					
66/ 65								.1	.1	.4	.2							8	8					
64/ 63								.2	.6	1.0		.2						18	18					
62/ 61						.1	.1	.9	1.4	.7	.3							32	32					
60/ 59					.1	.2	.3	.9	1.0	.6								28	28					
58/ 57					.3	1.4	1.1	1.1	.3									39	39					
56/ 55					.3	.4	2.0	1.8	.6	.2								48	48					
54/ 53				.2	.6	1.0	2.0	1.4	.3									50	50	3				
52/ 51			.1		.3	1.6	2.0	1.0	.1									46	46	8				
50/ 49			.1	.9	.6	1.7	2.9	.3										58	58	17				
48/ 47			.1	.7	.8	3.1	1.1	.4										56	56	51				
46/ 45		.1	.4	.4	2.2	1.8	2.6	.6										73	73	59	1			
44/ 43		.2	.4	1.7	1.4	1.7	.9	.1										58	58	69	3			
42/ 41		.4	.9	1.2	1.2	1.2	.6											50	50	83	4			
40/ 39		.7	1.9	1.0	2.1	1.4												64	64	80	17			
38/ 37	.3	.9	1.9	1.7	.8	.1												51	51	108	23			
36/ 35		1.3	1.9	.4	.8													40	40	85	35			
34/ 33		1.9	1.3	.7														35	35	88	54			
32/ 31	.2	2.3	.4	.3														30	30	96	74			
30/ 29		.4	1.1	.1														15	15	49	106			
28/ 27	.2	1.9	.6	.1														25	25	28	124			
26/ 25	.2	.9	.2															12	12	26	88			
24/ 23	.2	.7																8	8	13	68			
22/ 21	.3	.4	.2															9	9	12	81			
20/ 19		.3																3	3	5	62			
18/ 17		.3																3	3	3	42			
16/ 15	.1	.1																2	2	4	44			
14/ 13		.1																1	1	1	21			
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										Total	
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F						
Dry Bulb																								
Wet Bulb																								
Dew Point																								

2

APR

STATION

STATION NAME

YEARS

MONTH

0900-1100

HOURS (L. S. T.)

18

USAFETAC FORM 0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

1200-1400
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 STATION MARMSTROM AFB MT/GREAT FALLS 68-77 YEARS APR MONTH
PAGE 1 1500-1700 HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL				
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
84/ 83																	.1	1	1				
82/ 81													.1		.2	.2	.1	6	6				
80/ 79													.1		.2	.4		7	7				
78/ 77												.1	.1	.3	.1			6	6				
76/ 75													.3	.4	.2			9	9				
74/ 73										.1	.1	.4	.3	.6				14	14				
72/ 71									.1	.1	.1	1.7	1.2	.3				32	32				
70/ 69								.1	.1	.6	.2	1.1	.6	.4				28	28				
68/ 67									.1	.4	.9	.3	.7					22	22				
66/ 65							.1		.1	1.4	1.0	.4	.3					31	31				
64/ 63									.8	1.1	1.0		.3					29	29				
62/ 61							.1	.6	1.3	1.2	.7							35	35				
60/ 59							.6	.9	2.8	1.7	.1							54	54				
58/ 57						.1	.3	1.4	1.4	.7								36	36	1			
56/ 55					.2	.3	.7	2.2	2.4	.4								57	57	6			
54/ 53						.2	1.3	2.3	1.9	.4								56	56	9			
52/ 51				.2	.3	1.0	1.7	2.3	.8									57	57	27			
50/ 49				.1	.2	.6	1.6	1.8	.1	.1								40	40	45			
48/ 47			.1	.7	.8	1.3	.9	.8	.8									48	48	69			
46/ 45			.2	.8	.6	1.0	2.0	.6	.1									47	47	63			
44/ 43		.6	.6	1.3	.9	.7	.7	.2										44	44	74	4		
42/ 41		.2	.9	1.6	1.2	.8	.4											46	46	101			
40/ 39		.1	1.3	2.2	.7	.7												45	45	97	10		
38/ 37		1.1	2.0	.4	.3													35	35	107	12		
36/ 35		.8	1.3	.3														22	22	84	36		
34/ 33	.3	.8	.3	.4														17	17	75	41		
32/ 31	.1	.4	.2	.3														10	10	52	50		
30/ 29	.4	.7	.6	.3														18	18	24	104		
28/ 27		1.6	1.0															23	23	15	123		
26/ 25	.3	.3	.1															7	7	22	95		
24/ 23		.1																1	1	12	70		
22/ 21		.2																2	2	2	82		
20/ 19		.1																1	1		80		
18/ 17		.2																2	2	1	55		
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

24112 MARMSTROM AFB MT/GREAT FALLS 68-77 APR
STATION STATION NAME YEARS MONTH
PAGE 2 1500-1700

[illegible]

USAFETAC FORM 0.26-5 (OIA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

APR

PAGE 1

1800-2000
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	> 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
78/ 77														.2	.1			3	3					
76/ 75												.1	.2	.2				5	5					
74/ 73											.1	.1	.1					3	3					
72/ 71									.1	.1		.1	.3					6	6					
70/ 69										.1	.2	.7						9	9					
68/ 67									.3	.2	1.0	.2	.2					18	18					
66/ 65							.1			.8	.2	.2						12	12					
64/ 63						.1	.1	.1	.6	1.0	.6	.4						26	26					
62/ 61							.2	.1	.6	1.0	.3	.1						21	21					
60/ 59						.1	.6	.7	1.0	.6								26	26					
58/ 57					.1	.1	.8	1.7	1.2	.3	.1							39	39					
56/ 55						.7	1.2	1.3	1.4	.1								43	43	3				
54/ 53					.8	.4	1.6	1.8	.7	.1								48	48	3				
52/ 51			.2	.2	.3	1.6	2.7	1.1	.3									58	58	13				
50/ 49			.2	.1	.4	1.3	1.7	1.3		.1								47	47	18				
48/ 47			.2	.2	1.1	1.2	2.1	.6	.1									50	50	41				
46/ 45			.3	1.8	2.2	2.2	2.6	.3	.2									87	87	52	1			
44/ 43		.1	.6	1.0	.9	2.3	.4	.1										49	49	68	5			
42/ 41		.4	1.2	1.6	1.4	1.0	.6	.1										57	57	83	8			
40/ 39		.7	1.7	1.1	1.7	1.1	.2											58	58	87	8			
38/ 37		1.1	2.8	.8	.8	.7												55	55	109	23			
36/ 35	.1	1.8	2.0	.4	.2	.3												44	44	104	29			
34/ 33	.1	1.4	1.7	.3	.2	.1												25	35	104	42			
32/ 31	.3	.7	.8	.4	.1													21	21	75	74			
30/ 29	.3	.9	.4		.1													16	16	41	97			
28/ 27		1.7	.3	.2														20	20	30	122			
26/ 25	.7	.9	.4															18	18	25	95			
24/ 23		.6	.2															7	7	14	69			
22/ 21		.3																3	3	11	70			
20/ 19		.1																1	1	4	62			
18/ 17		.1																1	1		57			
16/ 15	.4	.1																5	5	5	43			
14/ 13		.6																5	5	1	20			
12/ 11		.1																1	1	5	21			
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature													
Rel. Hum.											$\leq 0 F$	$\leq 32 F$	$\approx 67 F$	$\approx 73 F$	$\approx 80 F$	$\approx 93 F$	Total							
Dry Bulb																								
Wet Bulb																								
Dew Point																								

2

2019-2020

APR

YEARS

MONTH

1800-2000
HOURS (L. S. T.)

FORM
JUL 64

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MARMSTROM AFB MT/GREAT FALLS

68-77

APR

STATION

STATION NAME

YEARS

MONTH

PAGE 1

2100-2300
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
66/ 65								.1	.1	.1	.1							4	4		
64/ 63										.1								1	1		
62/ 61							.2	.2	.2	.1								7	7		
60/ 59						.1	.3	.2	.3	.1								10	10		
58/ 57						.2	.7	.6	.4	.1								18	18		
56/ 55						.2	.4	.4	.1									11	11		
54/ 53						.9	1.4	.6	.2									28	28	1	
52/ 51				.1	.4	1.7	1.3	.8	.1									40	40	1	
50/ 49			.3	.1	.4	2.0	.9	.1										35	35	7	
48/ 47		.1	.3	.4	.7	2.0	1.2											43	43	9	
46/ 45		.3	.4	.9	3.1	1.6	.3	.1										61	61	18	
44/ 43		.3	.2	1.7	2.3	2.3	.1											63	63	38	4
42/ 41		.7	.8	2.2	2.2	1.1	.1											64	64	60	9
40/ 39		1.0	3.2	2.1	2.9	.9												91	92	65	13
38/ 37	.1	1.3	2.4	1.6	1.7	.3												67	67	94	9
36/ 35	.2	2.8	2.4	1.9	.9	.1												75	75	112	31
34/ 33	.4	3.4	2.0	1.8	.6	.3												77	77	114	35
32/ 31	.4	2.7	1.8	1.2	.1													56	56	113	92
30/ 29	.6	1.3	1.1	.9	.3													38	38	84	106
28/ 27	.1	1.7	.9	1.0														33	33	52	116
26/ 25	1.1	1.3	.1	.2														25	25	51	94
24/ 23		.9	.3	.1														12	12	20	63
22/ 21		1.1	.4															14	14	18	76
20/ 19		.9																8	8	17	65
18/ 17		.3																3	3	9	67
16/ 15	.3																	3	3	4	34
14/ 13		.2																2	2	1	16
12/ 11	.2	.2																4	4	5	17
10/ 9																					32
8/ 7		.1																1	1		8
6/ 5	.1																	1	1	2	3
4/ 3	.1																	1	1	1	4
2/ 1																					2
-4/ -5	.1																	1	1	1	
Element (X)	Σ x ²		Σ x		x̄		s _x		No. Obs.		Mean No. of Hours with Temperature										
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total				
Dry Bulb																					
Wet Bulb																					
Dew Point																					

PSYCHROMETRIC SUMMARY

68-77

YEARS

APR
MONTH

PAGE 2

2100-2300
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

APR

STATION

STATION NAME

YEARS

110114

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26-5 (OL A)
M11 44
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YFARS

ALL

HOURS (L - S - T -)

[illegible]

FORM 0-26-5 (01 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

FORM
TUN 64

USAFETAC

PSYCHROMETRIC SUMMARY

68-77

YEARS

MAY

PAGE 1 0000-0200
HOURS (L. S. T.)

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAY

PAGE 1 0300-0500
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
64/ 63								.1	.2									3	3		
62/ 61								.3										3	3		
60/ 59						.1		.1										2	2		
58/ 57					.5	.4	.4	.6										19	19		
56/ 55		.1	.2	.3	.1	.6	.3	.1										17	17		
54/ 53		.2	.5	.4	1.4	.4	.3											31	31	3	
52/ 51			.8	1.0	.8	1.5	.1											38	38	4	3
50/ 49		.2	1.7	1.3	1.2	1.0	.2											52	52	15	2
48/ 47		1.4	2.8	2.6	1.7	1.1	.1											90	90	29	2
46/ 45	.1	3.3	3.3	2.4	3.8	.3												123	123	73	19
44/ 43	.1	2.7	3.3	2.2	1.5	.1												92	92	92	48
42/ 41	.2	2.4	3.0	2.0	1.1													81	81	113	46
40/ 39	.4	3.3	3.0	3.2	.9													101	101	106	63
38/ 37	.6	2.5	2.3	1.8	.1													68	68	129	74
36/ 35	.4	4.6	2.2	2.8														93	93	98	107
34/ 33	.5	2.8	1.9	.8	.1													57	57	94	96
32/ 31	.1	1.8	1.1	.8														35	35	84	93
30/ 29	.1	.2	.6	.1														10	10	47	92
28/ 27	.2	.1	.5	.3														11	11	25	101
26/ 25		.2	.1															3	3	9	60
24/ 23		.1																1	1	6	44
22/ 21																				3	35
20/ 19																					12
18/ 17																					18
16/ 15																					7
14/ 13																					3
12/ 11																					2
8/ 7																					3
TOTAL	2.9	26.0	27.4	21.9	13.1	5.6	1.5	1.3	.2									930	930	930	930
Element (X)	Σ x'		Σ x		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										
Rel. Hum.	4641744		63986		68.8		16.052		930		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total				
Dry Bulb	1722607		39511		42.5		6.881		930			6.0					93				
Wet Bulb	1373025		35339		38.0		5.700		930			17.4					93				
Dew Point	1013982		29988		32.2		7.114		930			47.0					93				

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAY

MONTH

PAGE 1

0600-0800

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
74/ 73									.1									1	1				
70/ 69									.2		.1							3	3				
68/ 67							.1	.1	.2	.2								6	6				
66/ 65						.1	.1	.3	.3	.1								9	9				
64/ 63					.1	.4	.5	.5	.3									18	18				
62/ 61					.4	.2	.4	.6	.1	.1								18	18				
60/ 59					.6	.4	1.0	.6	.1									26	26				
58/ 57			.1	.3	.9	.9	1.0	.8										36	36	1			
56/ 55			.2	.6	1.6	1.6	1.4	.2										53	53	6			
54/ 53			.3	1.2	1.7	2.0	1.9											69	69	13			
52/ 51			1.2	2.2	1.3	2.0	.5											67	67	26			
50/ 49		.3	1.7	1.8	2.3	.9	.4											69	69	49	5		
48/ 47		2.0	3.3	2.2	1.6	1.9												103	103	73	11		
46/ 45		2.4	3.0	3.0	2.7	2.0	.1											123	123	119	33		
44/ 43		1.9	2.5	1.8	2.0	.1												78	78	118	64		
42/ 41		2.8	1.4	1.0	.8	.2												57	57	124	59		
40/ 39	.2	2.4	2.2	2.2	.9													72	72	101	102		
38/ 37	.2	2.0	1.0	.9	.2													40	40	93	97		
36/ 35	.2	2.6	1.2	.8	.3													47	47	87	101		
34/ 33		1.5	.6	.3														23	23	54	91		
32/ 31		.3	.1	.1														5	5	41	82		
30/ 29		.2		.1														3	3	16	84		
28/ 27		.1	.1	.1														3	3	3	78		
26/ 25				.1														1	1	3	58		
24/ 23																				1	26		
22/ 21																				2	16		
20/ 19																					11		
18/ 17																					4		
16/ 15																					4		
14/ 13																					2		
10/ 9																					1		
8/ 7																					1		
TOTAL	.6	18.6	19.1	18.6	17.4	12.9	7.5	3.2	1.4	.4	.1							930	930	930	930		
Element (X)	Σ x ²		Σ x		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		
Rel. Hum.	3935507		58333		62.7		17.257		930		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		
Dry Bulb	2142623		44033		47.3		7.886		930				1.2		1.0		.1						
Wet Bulb	1613981		38371		41.3		5.760		930				6.6										
Dew P	1133601		31847		34.2		6.806		930				36.7										

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTRUM AFB MT/GREAT FALLS
STATION NAME

68-77

YEARS

MAY
MONTH

PAGE 1 0900-1100
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
82/ 81												.2	.1		.1			4	4		
80/ 79											.1				.1		.1	3	3		
78/ 77													.1	.1	.1			3	3		
76/ 75									.5			.2	.3	.1				11	11		
74/ 73									.2	.2	.3	.5	.3					15	15		
72/ 71								.3	.5	.3	.9	.1	.1					21	21		
70/ 69								.3	.6	1.8	.4	.2						32	32		
68/ 67								1.1	1.5	.9	.1	.1						34	34		
66/ 65						.2	.9	1.9	1.0	.5	.2							44	44		
64/ 63					.1	.8	1.4	1.3	2.5	1.0	.1							66	66		
62/ 61					.2	.8	2.0	1.5	1.1	.5								57	57		
60/ 59					.8	1.2	1.0	2.8	1.8	.2								72	72	4	
58/ 57			.1	.2	.5	1.9	1.9	2.0	.3									66	66	14	
56/ 55			.1	.9	.9	1.5	2.5	1.3	.5									71	71	23	
54/ 53			.3	.6	1.7	1.7	1.5	1.0	.3									67	67	57	
52/ 51		.3	.8	1.1	1.5	1.6	1.5	.6										69	69	93	1
50/ 49		.1	1.7	.8	.6	1.1	1.4	.9										61	61	95	4
48/ 47		1.0	2.0	1.2	.8	1.5	1.0	.1										70	70	93	17
46/ 45	.1	1.1	1.2	1.3	1.3	.9	.3											57	57	133	38
44/ 43		.9	1.3	.9	.6	.3												37	37	116	68
42/ 41	.1	.9	.8	.4														20	20	93	70
40/ 39	.1	1.2	.4	.3														19	19	84	98
38/ 37		1.1	.6															16	16	66	80
36/ 35		.5	.1	.1	.1													8	8	33	112
34/ 33		.4																4	4	19	81
32/ 31	.1	.1		.1														3	3	4	75
30/ 29																				2	83
28/ 27																					62
26/ 25																				1	47
24/ 23																					35
22/ 21																					27
20/ 19																					14
18/ 17																					

USAFETAC
FORM 0-26-5 (OLA)
JUL 64
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

68-77

MAY
MONTH

PAGE 2 0900-1100
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS
STATION STATION NAME

68-77

MAY
MONTH

PAGE 1 1200-1400
HOURS (L. S. T.)

PSYCHROMETRIC SUMMARY

YEARS

MAY
MONTH

1200-1400
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

PAGE 1 1500-1700
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point
92/ 91																	.3	3	3	
86/ 85																	.3	3	3	
84/ 83													.3	.3	.2	.2	.8	17	17	
82/ 81												.2	.8		.5	.1		15	15	
80/ 79											.1	.5	.9	.4	.6			24	24	
78/ 77											.3	.4	1.0	.5	.2			23	23	
76/ 75											.8	1.1	.9	.5				30	30	
74/ 73									.1	.1	1.1	1.2	.9	.3				34	34	
72/ 71									.2	.3	1.7	1.3	.9					41	41	
70/ 69								.4	1.2	1.0	1.2	2.4	.5					62	62	
68/ 67						.2	.9	1.6	1.3	1.3	1.0	.1						59	59	
66/ 65						.5	1.1	1.0	1.5	.4	1.1	.2						54	54	
64/ 63					.1	.2	1.4	1.8	2.4	.9	.6	.3						72	72	
62/ 61						1.0	.8	1.5	1.3	1.2	.5							58	58	
60/ 59				.2	.5	.5	1.1	1.4	2.3	.1	.1							58	58	12
58/ 57			.1	.3	1.7	.6	.8	1.9	1.6	1.2	.1							78	78	23
56/ 55		.1	.3	.9	.8	.6	1.4	.6	1.1	.3								57	57	37
54/ 53		.1	.8	.6	.3	.3	.2	.1	1.0									32	32	93
52/ 51		.1	.8	.9	.5	.5	.5	.3	.3									37	37	119
50/ 49	.1	.2	.4	.9	.9	1.4	.3	.3										42	42	141
48/ 47		.4	1.4	.5	.3	.2	.3	.1										31	31	119
46/ 45		1.1	.6	1.3	.6	.4												38	38	73
44/ 43		1.3	.8	.2	.1													22	22	116
42/ 41		1.1	.1															11	11	78
40/ 39	.3	.4	.8	.1														15	15	61
38/ 37	.2	.6																8	8	29
36/ 35		.6																6	6	23
34/ 33																			6	94
32/ 31																				61
30/ 29																				75
28/ 27																				77
26/ 25																				59
24/ 23																				35
22/ 21																				32
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature								Total	
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F				
Dry Bulb																				
Wet Bulb																				
Dew Point																				

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

MAY
MONTH

1500-1700
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 68-71

MAY
MONTH

PAGE 1 1800-2000
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL	TOTAL			
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	> 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
84/ 83													.1					1	1		
82/ 81												.1	.4	.1	.1	.2		9	9		
80/ 79											.1			.1	.5			7	7		
78/ 77											.2		.2					4	4		
76/ 75										.2	.5	.4	.5	.6				22	22		
74/ 73									.3	.5	.3	.5	.6	.1				23	23		
72/ 71								.1	.3	.6	.8	.4	.3					24	24		
70/ 69							.1		.6	1.3	1.1	.4	.3	.1				37	37		
68/ 67							.3	.3	1.1	1.1	.9	.3	.1					38	38		
66/ 65					.1	.2	.5	1.2	1.4	1.6	.6	.1						54	54		
64/ 63					.1	.1	1.3	1.0	2.4	1.2	.5	.1	.1					63	63		
62/ 61						1.0	1.5	1.3	1.1	1.0	.5	.1						60	60		
60/ 59				.3	.6	1.5	1.2	2.0	1.4	.2	.3							71	71	7	
58/ 57			.5	.2	1.0	1.6	1.4	1.3	1.4	.3	.1							73	73	14	
56/ 55			.6	1.1	1.3	1.2	1.9	.5	1.1	.2								74	74	22	
54/ 53		.2	1.1	.8	1.0	1.3	.8	1.2	.6	.1								65	65	52	
52/ 51		.2	1.2	1.3	.9	1.1	1.0	1.0	.2	.1								64	64	98	8
50/ 49		.6	1.3	1.3	.3	1.0	.6	.4	.1									53	53	124	10
48/ 47		.5	1.4	1.0	.3	.2	.5	.1										38	38	137	26
46/ 45		1.0	1.0	1.4	.9	.5	.3											47	47	107	33
44/ 43		1.2	1.2	1.1	.1	.1	.3											37	37	98	72
42/ 41		1.3	.8	.1	.2	.1												23	23	86	69
40/ 39		1.8	.3															20	20	72	79
38/ 37	.4	.4	.3	.3														14	14	68	91
36/ 35	.1	.6																7	7	28	78
34/ 33		.2																2	2	9	83
32/ 31																				8	82
30/ 29																					58
28/ 27																					68
26/ 25																					43
24/ 23																					26
22/ 21																					33
20/ 19																					21
18/ 17																					22
Element (X)	ΣX^2		ΣX		\bar{X}		σ^2		No. Obs.		Mean No. of Hours with Temperature						Total				
Rel. Hum.											$\leq 0 F$	$\leq 32 F$	$\geq 67 F$	$\geq 73 F$	$\geq 80 F$	$\geq 93 F$	Total				
Dry Bulb																					
Wet Bulb																					
Dew Point																					

PSYCHROMETRIC SUMMARY

YEARS

1800-2000
HOURS (L. S. T.)

[illegible]

USAFETAC
FORM
JUL 68
0-26.5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH.
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAY
MONTH

PAGE 1 2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL D.B./W.B.	TOTAL					
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point			
84/ 83														.1	.1			2	2				
82/ 81														.1				1	1				
72/ 71												.1						1	1				
70/ 69									.2	.2	.1							5	5				
68/ 67							.2		.1		.1	.1						5	5				
66/ 65					.1	.1	.3	.6	.1	.1	.2							15	15				
64/ 63					.1	.5	.4	.1	.3	.8	.1							22	22				
62/ 61					.1	1.2	.5	.5	.6	.1								29	29				
60/ 59				.2	.2	.4	.4	.9	.6									26	26	1			
58/ 57			.1	.2	.5	1.7	.8	1.5	.2									47	47	3			
56/ 55			.5	.6	1.5	1.3	1.0	1.5	.2									62	62	8			
54/ 53		.1	.6	.6	1.2	2.8	1.6	.9	.1									74	74	16			
52/ 51		.8	1.5	2.2	1.1	1.9	.6	.6										81	81	34			
50/ 49		.6	2.0	2.4	1.5	1.7	.5	.4	.1									87	87	42			
48/ 47		1.2	2.6	2.7	1.3	1.0	.8	.1										89	89	79			
46/ 45		3.2	2.2	2.0	2.8	1.3	.6	.1										114	114	120			
44/ 43		1.5	2.8	.9	1.2	1.5												73	73	144			
42/ 41	.1	1.9	2.3	.8	.6													53	53	121			
40/ 39		2.9	1.9	1.2	.4	.3												63	63	100			
38/ 37	.2	1.9	.9	1.1	.4													42	42	98			
36/ 35	.4	1.3	.3	.5	.1													25	25	75			
34/ 33	.3	.4		.2														9	9	53			
32/ 31		.2	.1		.1													4	4	22			
30/ 29	.1																	1	1	10			
28/ 27																				3			
26/ 25																							
24/ 23																				1			
22/ 21																							
20/ 19																							
18/ 17																							
16/ 15																							
14/ 13																							
12/ 11																							
10/ 9																							
Element (X)	Σ X ²		Σ X		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

24112	MALMSTRUM AFB MT/GREAT FALLS	68-77	MAY
STATION	STATION NAME	YEARS	MONTH
PAGE 2			2100-2300
			HOURS (L. S. T.)

[illegible]

USAFETAC
FORM 0-26-5 (OL A)
JUL 64
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

MAY
MONTH

PAGE 1

ALL
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
92/ 91																.0	.0	5	5						
88/ 87																.0		1	1						
86/ 85																	.1	4	4						
84/ 83													.1	.1	.1	.0	.1	25	25						
82/ 81												.1	.2	.1	.1	.0	.0	43	43						
80/ 79											.1	.1	.2	.2	.2	.1		56	56						
78/ 77										.0	.1	.1	.3	.1	.0	.0		49	49						
76/ 75										.1	.2	.4	.3	.2				93	93						
74/ 73									.1	.1	.3	.4	.3	.1				101	101						
72/ 71							.0	.1	.2	.2	.7	.3	.2					129	129						
70/ 69							.0	.1	.5	.8	.5	.6	.1	.0				197	197						
68/ 67							.1	.4	.7	.6	.5	.3	.0					192	192						
66/ 65					.0	.1	.4	.8	.6	.7	.3	.2	.0					235	235						
64/ 63					.1	.3	.8	.8	1.3	.7	.2	.1	.0					320	320						
62/ 61					.1	.6	.8	.9	.9	.5	.2	.0						306	306	6					
60/ 59				.1	.4	.6	.8	1.2	1.1	.1	.1							330	330	32					
58/ 57		.0	.1	.3	.8	1.1	.9	1.4	.6	.2	.0							412	412	61					
56/ 55		.1	.3	.7	1.0	1.1	1.3	.7	.5	.1								433	433	141					
54/ 53		.1	.6	.7	1.1	1.3	1.0	.5	.3	.0								421	421	327	3				
52/ 51	.0	.2	1.0	1.4	1.0	1.4	.7	.4	.1	.0								463	463	504	23				
50/ 49	.0	.4	1.5	1.4	1.1	1.1	.5	.3	.0									472	472	600	43				
48/ 47		1.0	2.3	1.7	1.0	1.0	.3	.1										556	557	718	104				
46/ 45	.0	1.9	1.9	1.9	2.1	.8	.2	.0										659	659	810	275				
44/ 43	.0	1.5	2.0	1.2	.9	.4	.0											448	448	894	459				
42/ 41	.1	1.7	1.4	.8	.5	.1												333	333	808	537				
40/ 39	.1	2.0	1.4	1.2	.5	.0												387	387	693	662				
38/ 37	.3	1.5	.9	.8	.1													264	264	635	625				
36/ 35	.3	1.7	.7	.6	.1													253	253	463	820				
34/ 33	.2	.9	.5	.2	.0													130	130	321	694				
32/ 31	.0	.4	.3	.2	.0													68	68	227	608				
30/ 29	.1	.1	.1	.1														27	27	103	654				
28/ 27	.0	.1	.1	.1														19	19	48	635				
26/ 25		.0	.0	.0														6	6	21	400				
24/ 23		.0																1	1	11	272				
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature														
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total								
Dry Bulb																									
Wet Bulb																									
Dew Point																									

PSYCHROMETRIC SUMMARY

68-77

MAY
MONTH

PAGE 2

ALL

HOURS (L, S, T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
82/ 81														.1				1	1					
76/ 75												.1						1	1					
74/ 73										.1								1	1					
72/ 71						.1		.2	.1	.1								5	5					
70/ 69							.1	.7			.1							8	8					
68/ 67					.1	.4	.7	.2	.2	.1	.2							18	18					
66/ 65				.3	.3	.7	.6	.7	.6	.2								30	30					
64/ 63			.3	.8	.7	1.1	.8	.8	.2									42	42					
62/ 61			.2	.2	1.2	1.8	1.6	1.1										55	55	1				
60/ 59		.2	.9	.7	1.6	2.3	.9	.1										60	60	10				
58/ 57		.3	.9	1.6	2.1	1.6	.7											64	64	26	4			
56/ 55		.3	2.1	1.8	2.7	2.7	.3	.1										90	90	37	14			
54/ 53		.9	3.2	1.9	1.7	1.7	.8											91	91	59	11			
52/ 51		1.2	2.6	2.7	2.0	1.4	.2											91	91	102	28			
50/ 49		1.6	3.8	2.9	1.0	.6	.1											89	89	115	39			
48/ 47		2.4	2.4	2.4	.6	.6												76	76	118	66			
46/ 45	.2	2.4	1.6	1.7	1.3	.1												66	66	138	101			
44/ 43	.1	1.9	1.7	1.3	.8													52	52	93	112			
42/ 41		1.0	.7	.4	.2													21	21	80	88			
40/ 39		1.4	.8	.7														26	26	41	95			
38/ 37		.1	.6															6	6	48	101			
36/ 35			.1															1	1	17	89			
34/ 33		.4																4	4	9	45			
32/ 31		.1																1	1	4	32			
30/ 29		.1																1	1	1	34			
28/ 27																				1	26			
26/ 25																					11			
24/ 23																					1			
22/ 21																					3			
TOTAL		.314.6	21.8	19.3	16.2	15.0	6.7	3.9	1.1	.6	.3	.1		.1				900	900	900				
																		900		900				
Element (X)	Σx^2		Σ																					

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRQM AFB MT/GREAT FALLS

68-77

JUN
MONTH

PAGE 1

0300-0500
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
76/ 75										.1								1	1				
74/ 73								.1	.1		.1							3	3				
72/ 71									.1		.2							3	3				
70/ 69									.1									1	1				
68/ 67						.2			.3									5	5				
66/ 65				.1	.1	.3	.4		.2	.1								12	12				
64/ 63				.2	.6	.6	.8	.6	.3									27	27				
62/ 61		.3	.3	.1	.9	1.0	1.6	.1										39	39				
60/ 59			.7	.6	1.9	.6	.7											39	39	7			
58/ 57		.1	.2	1.2	1.6	1.8	.2	.1										47	47	11	3		
56/ 55		.7	1.1	2.9	2.2	1.8	.1											79	79	18	5		
54/ 53		.9	3.0	1.9	3.4	1.3	.1	.2										98	98	44	12		
52/ 51		1.9	3.3	2.2	2.1	.8	.1											94	94	77	18		
50/ 49		2.0	3.8	2.6	1.8		.1											92	92	111	24		
48/ 47		3.7	3.3	2.8	1.3	.7	.1											107	107	118	74		
46/ 45	.2	3.3	3.6	2.1	1.2	.1												95	95	146	91		
44/ 43		1.1	2.6	1.7	1.0													57	57	104	132		
42/ 41		1.8	1.6	.6	.6													40	40	81	71		
40/ 39		1.0	1.6	.6														28	28	71	97		
38/ 37		.4	1.2	.1														16	16	54	102		
36/ 35		.8	.1															8	8	28	87		
34/ 33		.4																4	4	21	66		
32/ 31	.1	.2																3	3	6	33		
30/ 29		.2																2	2	1	33		
28/ 27																				2	32		
26/ 25																					11		
24/ 23																					5		
22/ 21																					4		
TOTAL		.318	.926	.319	.618	.799	1	4.2	1.1	1.2	.2	.3						900	900	900	900		
Element (X)	Σ x ²		Σ x		Σ		Σ x		No. Obs.		Mean No. of Hours with Temperature										Total		
Rel. Hum.	4333242		60970		67.715		.022		900		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F							
Dry Bulb	2369706		45732		50.8		7.146		900			.5	1.3	.4					90				
Wet Bulb	1878436		40810		45.3		5.574		900			.9							90				
Dew Point	1466685		35857		39.8		6.510		900			11.8							90				

REVISOR PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26-5 (OL A)

FORM 1 JUL 64

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MARMSTROM AFB MT/GREAT FALLS

68-77

JUN

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0600-0800

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
82/ 81														.1				1	1						
80/ 79												.1			.2			3	3						
76/ 75								.1	.3	.2	.1							7	7						
74/ 73							.1	.4	.3	.1	.2	.1						12	12						
72/ 71						.1	.4	.7	.3		.2							16	16						
70/ 69						.2	.2	1.1	.4	.1	.2							21	21						
68/ 67				.1	.2	1.0	1.0	.9	.6	.1								35	35						
66/ 65			.1	.1	.4	1.0	2.0	.7	.1	.1								41	41						
64/ 63			.6	.7	1.0	3.0	2.2	1.6										81	81	1					
62/ 61			.2	.7	1.6	1.7	2.0	.7	.1									62	62	9					
60/ 59			.4	1.0	2.3	1.6	.9	.2										58	58	26					
58/ 57			1.3	2.2	2.9	1.8	.7	.3	.1									84	84	36	9				
56/ 55		.6	2.1	1.9	1.9	2.1	.7	.2										85	85	56	9				
54/ 53		.6	2.3	2.6	2.7	1.6	.4	.1										92	92	105	17				
52/ 51		.7	1.9	1.8	1.7	1.0	.2	.1										66	66	123	35				
50/ 49		2.4	2.9	1.8	1.8	.9	.1											89	89	111	59				
48/ 47		2.0	3.1	2.0	1.1	.6												79	79	127	91				
46/ 45	.2	1.4	1.8	.8	.4	.1												43	43	110	127				
44/ 43		.2	.4	.4	.1													11	11	90	123				
42/ 41	.1	.3	.2	.2														8	8	58	90				
40/ 39			.2															2	2	27	81				
38/ 37																				15	85				
36/ 35																				2	50				
34/ 33		.4																4	4		47				
32/ 31																				4	27				
30/ 29																					20				
28/ 27																					23				
26/ 25																					3				
24/ 23																					2				
22/ 21																					1				
20/ 19																					1				
TOTAL	.2	8.7	17.7	16.2	18.1	16.6	11.0	7.1	2.3	.7	.8	.2		.1	.2				900		900				
																		900		900					
Element (X)	Σ X ²		Σ X		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature							Total							
Rel Hum.	3530607		54497		60.6		16.019		900		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	90								
Dry Bulb	2920807		50799		56.4		7.717		900				9.5	2.3	.1		90								
Wet Bulb	2175774		43986		48.9		5.381		900				.4				90								
Dew Point	1623873		37783		42.0		6.476		900				7.7				90								

FORM 0-26-5 (OL A) REVISD PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

08-77
YEARS

JUN
MONTH

PAGE 1

0900-1100
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9	10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
86/ 85													.2		.1				3	3			
84/ 83											.1	.1	.2	.3		.1			8	8			
82/ 81											.3	1.1	.4	.4	.1	.1	.3		26	26			
80/ 79										.8	1.3	1.0	.2	.2	.2	.1			35	35			
78/ 77										.1	.2	1.1	.6	.6	.3	.1			27	27			
76/ 75								.3	.8	1.2	1.3	.8	.4	.3					47	47			
74/ 73						.1	.3	.3	1.3	1.7	1.0	.6							48	48			
72/ 71						.6	.7	.8	1.4	1.2	.9	.2	.1						53	53			
70/ 69					.4	.4	1.0	1.6	1.3	1.8	.6	.1							65	65			
68/ 67					.2	.8	2.0	1.7	1.3	1.0	.2								65	65			
66/ 65				.1	.7	.7	1.9	1.7	1.1	.8	.1	.1							64	64	2		
64/ 63				.2	.4	1.7	1.7	2.1	2.1	.8	.3	.1							85	85	25		
62/ 61				.6	.4	.7	1.8	2.1	.9	.2									60	60	48		
60/ 59			.1	1.0	1.1	.8	.9	.9	.3	.1									47	47	52		
58/ 57			.7	1.3	1.2	.8	.8	.8	.2										52	52	73	7	
56/ 55			1.3	1.0	.9	1.1	1.2												50	50	108	16	
54/ 53		.2	1.6	1.1	1.0	1.2	.6	.2	.1										54	54	116	30	
52/ 51		.7	2.1	1.6	1.1	1.1													59	59	113	36	
50/ 49		1.2	.9	.3	.6	.2													29	29	116	71	
48/ 47		.4	.4	.2	.1														11	11	94	91	
46/ 45			.1	.2	.1														4	4	76	112	
44/ 43		.2	.2	.1															5	5	44	86	
42/ 41																					22	87	
40/ 39																					7	73	
38/ 37																					1	70	
36/ 35		.2																	2	2		64	
34/ 33		.1																	1	1	2	51	
32/ 31																					1	35	
30/ 29																						30	
28/ 27																						24	
26/ 25																						9	
24/ 23																						4	
22/ 21																						2	
20/ 19																						1	
Element (X)	Σ X ²		Σ X		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F.		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

YEARS

JUN

HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

JUN
MONTH

PAGE 1

1200-1400
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
92/ 91												.1			.1	.2	.2	5	5						
90/ 89												.1		.3	.3	.2	.3	12	12						
88/ 87											.1	.1	.6	.8	.6	.4	.3	26	26						
86/ 85											.3	.7	1.0	1.1	.1	.2	.2	33	33						
84/ 83										.2	.6	1.1	.8	.1	.3	.2	.2	32	32						
82/ 81									.1	.6	1.1	.9	.9	1.2	.3	.1		47	47						
80/ 79								.2	.4	.8	.8	1.4	1.4	.7	.1	.1		54	54						
78/ 77								.4	.2	.4	1.2	1.7	.8	.7	.2			51	51						
76/ 75							.2	.3	.6	.9	1.2	1.0	.8	.4				49	49						
74/ 73						.1	.2	.7	1.1	1.1	1.4	.4	.1					47	47						
72/ 71						.1	.7	.8	1.2	1.3	1.1	.7	.2					55	55						
70/ 69					.1	.3	.3	1.4	.8	2.1	1.1	.1	.2	.1				60	60	1					
68/ 67					.1	.7	1.8	.6	.8	1.2	1.1	.4						60	60	1					
66/ 65					.3	.4	.9	1.4	1.6	1.2	.2	.3						58	58	19					
64/ 63				.1	.6	.6	1.6	1.8	.8	1.6	.3							65	65	40					
62/ 61				.4	1.4	1.0	1.0	.8	1.3									54	54	52					
60/ 59				.7	1.4	.9	1.1	.4	.2									43	43	67	2				
58/ 57			.4	.3	.3	.9	1.0	.4	.1									32	32	83	10				
56/ 55		.1	.8	1.3	.8	.2	.4	.2										35	35	124	10				
54/ 53		.3	.8	1.0	.4	.3	.3											29	29	108	21				
52/ 51		.1	1.1	.1	.6	.2												19	19	125	39				
50/ 49	.1	.2	.3	.4	.2													12	12	104	65				
48/ 47			.9	.1														9	9	70	66				
46/ 45		.3	.2	.2														7	7	62	104				
44/ 43		.3																3	3	29	68				
42/ 41																				12	86				
40/ 39																					90				
38/ 37		.1	.1															2	2		79				
36/ 35		.1																1	1	2	71				
34/ 33																				1	52				
32/ 31																					30				
30/ 29																					40				
28/ 27																					34				
26/ 25																					16				
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature							Total							
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total								
Dry Bulb																									
Wet Bulb																									
Dew Point																									

2

YEARS _____ MONTH JUN
 PAGE 2 1200-1400
 HOURS (L. S. T.)

YEARS

1200-1400
HOURS (L. S. T.)

USA FETAC **FORMA** **0-26-5 (OL A)** **REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE**

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

JUN

MONTH

PAGE 1

1500-1700
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL			
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
94/ 93													.1	.1				2	2			
92/ 91														.3	.4	.3	.2	12	12			
90/ 89												.1		.4	.8	.1	.8	20	20			
88/ 87													.4	1.0	.6	.3	1.1	31	31			
86/ 85									.1		.1	.8		.4	.7	.1	.2	.3	25	25		
84/ 83										.4	.2	1.0	1.1	.8	.8	.3		42	42			
82/ 81									.2	.3	1.3	.9	1.7	1.7	.6	.1		61	61			
80/ 79									.2	.3	1.6	.6	.6	1.3	.3	.4		48	48			
78/ 77								.3	.6	1.0	.9	1.2	1.2	.6	.2			54	54			
76/ 75						.1	.1	.2	.4	1.1	1.3	1.2	1.0	.4				54	54			
74/ 73						.1	.3	.1	.8	.8	2.2	1.0	.3					51	51			
72/ 71								1.0	.9	1.0	1.4	.7	.1	.1				47	47			
70/ 69				.1	.3	.1	.3	1.7	.4	2.0	.9	1.1	.6					68	68	3		
68/ 67						.2	1.2	.4	.2	.7	1.7	.1	.1					42	42	2		
66/ 65					.2	.6	1.2	.4	1.7	.9	.7	.3						54	54	19		
64/ 63				.1	1.1	.8	.8	1.2	1.4	1.0	.4							62	62	38		
62/ 61			.1	.4	.7	1.0	.9	.7	1.7									49	49	64	2	
60/ 59				.7	1.2	.2	.7	.6	.6									35	35	53	3	
58/ 57			.2	.8	1.3	.8	.2	.2	.1									33	33	80	6	
56/ 55		.1	.6	1.7	.4	.7	.3	.2										36	6	133	13	
54/ 53		.2	1.1	.7	.3	.4	.2											27	27	121	21	
52/ 51		.1	1.3	.4	.2	.1												20	20	116	30	
50/ 49		.1	.7	.6	.1													13	13	106	57	
48/ 47			.9	.2														10	10	72	74	
46/ 45		.1																1	1	61	116	
44/ 43					.1													1	1	23	64	
42/ 41			.1	.1														2	2	6	62	
40/ 39																					75	
38/ 37																				2	85	
36/ 35																			1	77		
34/ 33																					55	
32/ 31																					44	
30/ 29																					40	
28/ 27																					37	
Element (X)	Σ X ²		Σ X		Σ		Σ X		No. Obs.		Mean No. of Hours with Temperature											
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total					
Dry Bulb																						
Wet Bulb																						
Dew Point																						

PSYCHROMETRIC SUMMARY

YEARS

JUN
MONTH

1500-1700

HOURS (L. S. T.)

USAFETAC
FORM
M11 -
0-26-5 (DLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

JUN
MONTH

PAGE 1 1800-2000
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dzw Point			
90/ 89											.1		.2	.1		.1	.1	6	6					
88/ 87													.1	.2			.3	6	6					
86/ 85											.1	.2	.2	.1	.1	.1	.2	10	10					
84/ 83									.1		.3	.2	.4	.1		.6		16	16					
82/ 81									.1	.1	1.0	.6	.2	.7	.3			27	27					
80/ 79							.2	.2	.1	.8	.7	.9	.9	.3	.3			40	40					
78/ 77							.2	.2	.9	.9	1.0	.2	.9	.1	.1			41	41					
76/ 75							.2	.4	.9	1.1	.8	1.1	.7	.2				49	49					
74/ 73						.1	.2	.3	.9	.4	1.1	.7	.2					36	36					
72/ 71					.1	.3	.1	.7	1.7	1.3	1.4	.3	.2					56	56					
70/ 69				.6	.6	.2	1.0	1.6	1.3	1.0	.6	.1						57	57	2				
68/ 67			.4	.7	.7	.2	1.3	.2	1.2	1.2	.6	.4						57	57	3				
66/ 65			.1	.2	.8	.9	1.2	.9	1.2	1.1	.4	.1						63	63	11				
64/ 63			.2	.9	1.2	2.0	.7	1.4	1.9	1.1	.4	.1						90	90	21	1			
62/ 61			.3	1.6	.7	.3	1.0	1.1	1.3	.7								63	63	48	3			
60/ 59			.3	1.3	1.1	1.1	1.2	1.1	.3		.1							60	60	47	8			
58/ 57		.2	.3	1.6	.6	1.0	.4	.9	.2									47	47	95	16			
56/ 55		.3	1.6	1.0	.8	.8	.9	.4										52	52	112	20			
54/ 53			1.9	1.6	.6	.8	.3	.2										48	48	123	32			
52/ 51		.6	2.0	.8	.2	.1	.1											34	34	98	40			
50/ 49		.8	1.7	.2		.1												25	25	111	70			
48/ 47		.3	.3	.2														8	8	106	93			
46/ 45		.3	.1	.1	.1													6	6	68	97			
44/ 43			.1		.1													2	2	37	80			
42/ 41				.1														1	1	12	56			
40/ 39																				3	63			
38/ 37																				1	69			
36/ 35																				2	66			
34/ 33																					44			
32/ 31																					43			
30/ 29																					37			
28/ 27																					24			
26/ 25																					23			
24/ 23																					9			
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature						Total					
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total					
Dry Bulb																								
Wet Bulb																								
Dew Point																								

2

2

JUN

STATION

STATION NAME

YEARS

MONTH

1800-2000

HOURS (L. S. T.)

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 JUN
STATION STATION NAME YEARS MONTH
PAGE 1 2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point					
84/ 83													.1						1	1					
82/ 81												.1							1	1					
80/ 79										.1	.1	.1							3	3					
78/ 77									.1	.1	.1	.1							4	4					
76/ 75									.3	.1	.1	.2	.1						8	8					
74/ 73								.2	.2	.2	.2		.1						8	8					
72/ 71						.4	.8	.3	.4	.3	.6	.1							27	27					
70/ 69					.1	.4	.6	1.2	.4	.3	.2	.1							31	31					
68/ 67					.2	.8	.6	1.3	.9	.9	.1								43	43					
66/ 65			.1	.1	1.0	.7	1.8	1.4	.6	.3									54	54					
64/ 63			.8	.4	.3	1.9	1.4	1.3	.8	.3									66	66					
62/ 61			.2	.6	1.9	1.9	1.9	1.0	.1										68	68	12				
60/ 59		.1	.7	1.3	1.9	1.2	1.2	.8	.1										66	66	37	1			
58/ 57		.7	1.6	1.1	2.3	1.3	1.6	.8	.1										85	85	32	6			
56/ 55		.4	3.1	1.7	1.8	2.7	.6	.4	.1										97	97	70	20			
54/ 53		.9	2.0	1.8	.7	2.6	1.4	.1											85	85	101	23			
52/ 51		.9	2.0	2.1	1.7	.9	1.0	.1											78	78	126	39			
50/ 49		1.6	3.8	1.2	1.2	.3	.2												75	75	121	61			
48/ 47		1.1	1.4	.9	.3	.1													35	35	102	85			
46/ 45		.8	.9	.6	.9														28	28	117	108			
44/ 43		1.3	.4	.8	.1	.2													26	26	79	100			
42/ 41		.2	.2																4	4	52	86			
40/ 39		.1	.1	.1															3	3	28	64			
38/ 37																					14	82			
36/ 35		.1	.1																2	2	2	76			
34/ 33		.1	.1																2	2	4	34			
32/ 31																					3	34			
30/ 29																						31			
28/ 27																						28			
26/ 25																						14			
24/ 23																						3			
22/ 21																						3			
20/ 19																						1			
18/ 17																						1			
Element (X)	Σ X ²			Σ X			X̄			σ _x			No. Obs.			Mean No. of Hours with Temperature							Total		
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F				
Dry Bulb																									
Wet Bulb																									
Dew Point																									

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS _____ JUN _____
 MONTH _____
 PAGE 2 2100-2300
 HOURS (L. S. T.) _____

[illegible]

PSYCHROMETRIC SUMMARY

68-77

JUN
MONTH

PAGE 1

ALL

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31		Dry Bulb	Wet Bulb	Dew Point
94/ 93														.0	.0			2	2		
92/ 91														.0	.0	.1	.1	17	17		
90/ 89											.0	.0	.0	.1	.1	.1	.2	38	38		
88/ 87											.0	.2	.1	.3	.1	.1	.2	63	63		
86/ 85										.0	.1	.1	.2	.3	.0	.1	.1	71	71		
84/ 83										.0	.1	.2	.3	.1	.2	.1	.0	99	99		
82/ 81										.1	.2	.6	.4	.4	.5	.2	.1	164	164		
80/ 79							.0	.1	.2	.4	.5	.4	.4	.3	.1	.1		183	183		
78/ 77							.0	.1	.3	.4	.5	.5	.4	.2	.1			177	177		
76/ 75						.0	.1	.2	.5	.6	.5	.5	.4	.1				216	216		
74/ 73						.1	.1	.2	.5	.6	.8	.5	.1	.0				206	206		
72/ 71					.0	.2	.3	.6	.8	.7	.7	.3	.1	.0				262	262		
70/ 69				.0	.2	.2	.4	1.2	.6	.9	.5	.2	.1	.0				311	311	6	
68/ 67				.1	.2	.5	1.1	.7	.7	.7	.5	.1	.0					325	325	6	
66/ 65			.0	.1	.5	.7	1.3	.9	.9	.6	.2	.1						376	376	51	
64/ 63			.2	.4	.7	1.4	1.2	1.3	.9	.6	.2	.0						518	518	125	
62/ 61		.0	.2	.6	1.1	1.2	1.5	.9	.7	.1								450	450	234	
60/ 59		.0	.4	.9	1.6	1.1	.9	.5	.2	.0	.0							408	408	299	
58/ 57		.2	.7	1.3	1.5	1.2	.7	.4	.1									444	444	436	
56/ 55		.3	1.6	1	1.7	1.4	1.5	.6	.2	.0								524	524	658	
54/ 53		.5	2.0	.6	1.3	1.2	.5	.1	.0									524	524	777	
52/ 51		.8	2.0	1.5	1.2	.7	.2	.0										461	461	880	
50/ 49	.0	1.2	2.2	1.3	.8	.3	.1											424	424	895	
48/ 47		1.3	1.6	1.1	.4	.2	.0											335	335	807	
46/ 45	.1	1.1	1.0	.7	.5	.0												250	250	778	
44/ 43	.0	.6	.7	.5	.3	.0												157	157	499	
42/ 41	.0	.4	.3	.2	.1													76	76	323	
40/ 39		.3	.2	.2														59	59	177	
38/ 37		.1	.2	.0														24	24	135	
36/ 35		.2	.0															14	14	54	
34/ 33		.2	.0															15	15	37	
32/ 31	.0	.0																			

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC 0-26-5 (QLA)

24112 MALMSTROM AFB MT/GREAT FALLS
STATION STATION NAME

68-77

JUN
MORT

PAGE 2

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26-5 (01 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALHSTROM AFB MT/GREAT FALLS

68-77

JUL

PAGE 1 0000-0200
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
82/ 81														.1				1	1					
80/ 79												.1						1	1					
78/ 77											.1							1	1					
76/ 75							.1			.1	.2							4	4					
74/ 73								.1	.4	.1	.2							8	8					
72/ 71						.1	.1	.4	.8	.4	.3							20	20					
70/ 69			.1				.2	.4	.9	.4	.1							20	20					
68/ 67		.2	.2		.6	.8	1.3	1.3	1.0	.4								54	54					
66/ 65		.3	.4	.2	.9	1.0	2.3	.9	.5	.1								61	61	4	2			
64/ 63			.3	.3	1.1	3.9	2.2	1.2	.4									87	87	6	4			
62/ 61		.3	.3	1.1	1.6	2.7	1.9	1.2	.9	.3								96	96	4	3			
60/ 59		.2	1.2	1.3	3.1	3.3	1.0	.6	.3									103	103	21	5			
58/ 57		1.4	1.8	1.5	2.6	2.8	.5	.4	.2	.1								106	106	47	6			
56/ 55		.5	1.7	3.7	2.3	3.3	.9	.1										116	116	97	21			
54/ 53		.9	1.3	3.0	2.5	1.7	.9											95	95	126	33			
52/ 51		.6	1.0	1.3	1.1	.9	.1											43	43	154	36			
50/ 49		.1	1.3	.6	.8	.4	.1	.1										32	32	126	60			
48/ 47		.4	1.2	.8	.4	.6	.1											33	33	113	72			
46/ 45		.5	.2	.6	1.1		.2											25	25	92	132			
44/ 43		.5	.3	.3	.1	.1												13	13	56	107			
42/ 41		.1	.1	.6		.1												9	9	33	106			
40/ 39		.1			.1													2	2	23	86			
38/ 37																				17	77			
36/ 35																				8	45			
34/ 33																				2	33			
32/ 31																				1	26			
30/ 29																					35			
28/ 27																					24			
26/ 25																					4			
24/ 23																					3			
22/ 21																					4			
20/ 19																					3			
18/ 17																					3			
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ			
Rel. Hum.																								
Dry Bulb																								
Wet Bulb																								
Dew Point																								
Mean No. of Hours with Temperature																								
		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total										

PSYCHROMETRIC SUMMARY

YEARS

JUL
MONTH

0000-0200
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

JUL
MONTH

HOURS (L. S. T.)

PSYCHROMETRIC SUMMARY

YEARS

0900-1100
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

JUL
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[illegible]

USAFETAC FORM 0.26-5 (OL A) JUL 64
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

JUL
MONTH

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
100/ 99																		.2	2	2			
98/ 97																		.2	2	2			
96/ 95																		.8	7	7			
94/ 93															.1	.5		.6	12	12			
92/ 91														.1	.2	.5		1.9	26	26			
90/ 89											.1	.2	.5	.2	.9	.8		.9	33	33			
88/ 87								.1		.3	.2	.4	.4	1.3	1.0	.8		.9	50	50			
86/ 85									.1		.3	1.3	1.6	1.6	1.4	1.6		.2	76	76			
84/ 83									.2	.2	.9	1.2	1.9	1.9	1.2	.5		.3	78	78			
82/ 81							.1		.2	.5	.5	1.0	1.9	1.5	1.2	1.2	.3	.1	80	80			
80/ 79							.1		.1	.6	1.4	2.4	2.5	1.2	.3	.4	.5		89	89			
78/ 77				.1	.1		.1	.2	.4	.9	1.5	1.6	1.4	.5	.3	.6			73	73			
76/ 75				.1	.1			.1	.6	1.4	2.5	1.4	1.4	.6	1.0				86	86			
74/ 73				.1	.2			.1	1.0	1.3	1.4	1.8	1.1	.3	.4				72	72	1		
72/ 71				.2	.2	.1	.3	.6	1.7	1.8	1.5	.3	.6						70	70	3		
70/ 69				.1	.1	.4	.4	1.1	1.1	1.3	.4	.6	.1						53	53	8	1	
68/ 67				.1	.2	.4	.5	.6	.3	.5	.2	.3							31	31	13	5	
66/ 65				.2	.2	.1	.5	.5	.3		.1								19	19	33	1	
64/ 63				.6	.4	.6	.5	.2		.2									25	25	68	1	
62/ 61			.1		.3	.4		.2											10	10	112	10	
60/ 59			.1	.2	.4		.1												8	8	151	6	
58/ 57			.1	.2	.3		.1												7	7	158	19	
56/ 55			.2	.2	.4	.3	.2												13	13	131	17	
54/ 53			.1	.1		.2													4	4	107	44	
52/ 51				.1	.1														2	2	70	51	
50/ 49			.1																1	1	36	56	
48/ 47				.1															1	1	25	66	
46/ 45																					8	122	
44/ 43																					5	104	
42/ 41																					1	78	
40/ 39																						75	
38/ 37																						82	
36/ 35																						59	
34/ 33																						42	
Element (X)	Σ X ²		Σ X		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77

YEARS

JUL
MONTH

PAGE 2

1200-1400
HOURS (L, S, T.)

[illegible]

USAFETAC
FORM
NM 44
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

68-77

JUL
MONTH

PAGE 1 1500-1700
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL D.B./W.B.	TOTAL			
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb		Wet Bulb	Dew Point		
104/ 103																		.3	3	3			
100/ 99																		.1	1	1			
98/ 97																		.1	1	1			
96/ 95																		1.2	11	11			
94/ 93																		2.7	25	25			
92/ 91															.5	.5	.9	2.9	45	45			
90/ 89										.2	.1	.1		1.3	1.3	1.4	1.8	58	58				
88/ 87										.1		.5	.5	1.9	1.4	1.2	2.6	77	77				
86/ 85									.1	.4	.4	.8	1.3	1.9	1.3	1.3	1.0	79	79				
84/ 83							.2		.5	.9	1.2	2.0	1.5	1.6	.5	.5		84	84				
82/ 81					.1	.1		.1	.1	.6	1.0	1.8	1.6	1.2	.8	1.0	.3	81	81				
80/ 79				.1	.1		.1	.3	.5	.4	1.8	1.9	1.0	1.6	1.2	.4	.1	90	90				
78/ 77							.1	.1	.6	.9	2.0	2.2	.9	1.0	.3	.2		77	77				
76/ 75								.3	1.0	2.0	1.5	1.5	.6	.8				72	72				
74/ 73				.1	.1		.1	.9	.6	.9	1.1	.6	.2	.3				46	46		4		
72/ 71					.5	.1	.4	.3	.8	.9	.6		.3	.1				38	38		5		
70/ 69				.2	.2	.6	.2	.6	.4	1.2		.4	.2					39	39		5		
68/ 67				.2	.3	.6	.3	.2	.2	.5	.1	.1						25	25		7		
66/ 65				.2	.1		.3	.3	.1	.2								12	12		32		
64/ 63			.1	.2	.3	.5	.8		.3									21	21		66		
62/ 61				.1		.3	.1	.2		.1								8	8		120		
60/ 59			.2	.3	.2	.2	.1											10	10		159		
58/ 57			.3	.3	.2	.1	.1											10	10		161		
56/ 55					.2	.4												6	6		134		
54/ 53		.1				.2												3	3		108		
52/ 51				.1		.1												2	2		64		
50/ 49		.1	.3															4	4		26		
48/ 47			.1															1	1		24		
46/ 45		.1																1	1		12		
44/ 43																				3	104		
42/ 41																					80		
40/ 39																					78		
38/ 37																					71		
36/ 35																					74		
Element (X)	Σ X ²		Σ X		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

68-77

YEARS

JUL
MONTA

PAGE 2 1500-1700
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

68-77

JUL
MONTH

PAGE 1 1800-2000
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																																	TOTAL D.B./W.B.	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point																		
102/101																	.1	1	1																			
98/ 97																	.1	1	1																			
96/ 95																	.3	3	3																			
94/ 93																	.5	5	5																			
92/ 91																	.3	3	3																			
90/ 89															.4	.4	.4	1.4	25	25																		
88/ 87												.1	.4	1.0	.6	.8	1.1	37	37																			
86/ 85								.1	.3	.2	.3	.8	1.3	.6	1.3	.8	.6	38	38																			
84/ 83							.1	.3	.2	.3	.8	1.3	1.3	.6	1.4	.4	.4	61	61																			
82/ 81							.1	.1	.3	.5	1.1	2.4	1.3	1.0	.9	1.0	.1	81	81																			
80/ 79					.1	.2	.1	.3	.8	.6	2.4	1.4	1.2	.9	.3	.3		80	80																			
78/ 77				.1	.1	.2	.1	.4	.8	1.3	1.3	1.6	1.0	1.4	.1			77	77																			
76/ 75			.2		.2		.2	1.0	1.6	2.4	1.0	1.3	.6	.4		.1		84	84																			
74/ 73			.1	.1	.3	.5	1.2	2.0	2.0	1.8	.5	.6	.2	.1				90	90																			
72/ 71			.1	.1	.3	.6	1.5	1.5	1.0	1.4	.6	.8						75	75																			
70/ 69			.1	.1	.3	.6	1.2	1.2	1.1	.4	.5	.3						61	61																			
68/ 67			.1	.3	.5	.9	.8	.9	.8	.5	.3	.3						50	50																			
66/ 65			.4	.4	.9	.2	.4	.8	.3	.4								36	36																			
64/ 63			.5	.3	.5	1.0	.9	.6	.6	.2	.1							45	45																			
62/ 61		.1	.1	.5	.3	.4	.3	.5	.1									23	23																			
60/ 59			.1	.1	.3	.4	.1											10	10																			
58/ 57			.6	.2	.4	.2	.1											15	15																			
56/ 55			.3	.3	.1	.2		.1										10	10																			
54/ 53		.1	.1	.3	.1	.2												8	8																			
52/ 51			.2	.1	.1			.1										5	5																			
50/ 49		.1																1	1																			
48/ 47		.2																2	2																			
46/ 45																																						
44/ 43		.2																2	2																			
42/ 41		.1																1	1																			
40/ 39																																						
38/ 37																																						
36/ 35																																						
34/ 33																																						
Element (X)	ΣX^2		ΣX		\bar{X}		σ_X		No. Obs.		Mean No. of Hours with Temperature										Total																	
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F																						
Dry Bulb																																						
Wet Bulb																																						
Dew Point																																						

PSYCHROMETRIC SUMMARY

YEARS

1800-2000
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26-5 (OL A)

FORM 4-74

JSAFETAC

PSYCHROMETRIC SUMMARY

68-77

YEARS

JUL
MONTH

PAGE 2

2100-2300
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26.5 (OL A)

USAFETAC

PSYCHROMETRIC SUMMARY

JUL
MONTH

ALL

PSYCHROMETRIC SUMMARY

YEARS

ALL

HOURS (L, S, T.)

[illegible]

PSYCHROMETRIC SU

68-77

YEARS

MONTH

PAGE 1

0000-0200
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

0300-0500
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
74/ 73									.2	.1	.2							5	5		
72/ 71							.1		.4	.2	.1							8	8		
70/ 69							.2	.4	.1	.2								9	9		
68/ 67					.1		.2	.2	.1	.2								8	8		
66/ 65				.6	.9	1.0	.8	.9	.2									40	40		
64/ 63		.2	.5	.4	1.5	.9	1.3	1.0										54	54		
62/ 61			.3	.5	1.1	.6	1.3	1.4	.6									55	55		
60/ 59		1.0	.6	1.5	1.3	2.0	1.7	1.4	.2									91	91	12	3
58/ 57		.4	.8	1.4	1.6	2.4	1.4	.4										78	78	24	5
56/ 55		2.3	1.9	2.6	2.7	2.8	1.4	.6										133	133	54	13
54/ 53		2.0	1.6	1.9	2.8	2.4	.4	.3										107	107	82	25
52/ 51	.1	2.0	3.0	1.9	3.0	1.0	.1	.2										106	106	93	42
50/ 49	.2	1.6	5.3	1.1	1.3	1.5	.3											105	105	141	51
48/ 47		1.2	1.7	1.3	.9	.6												53	53	152	80
46/ 45		1.2	.9	1.0	.9	.5												41	41	145	80
44/ 43		.5	.6	.9	.2													21	21	94	103
42/ 41		.5	.1	.1	.1													8	8	61	87
40/ 39		.8		.1														8	8	42	77
38/ 37																				24	99
36/ 35																				5	78
34/ 33																				1	69
32/ 31																					42
30/ 29																					28
28/ 27																					22
26/ 25																					13
24/ 23																					7
22/ 21																					3
20/ 19																					3
TOTAL	.3	13.5	17.1	14.8	17.0	16.2	9.0	7.1	3.5	1.0	.3							930	930	930	930
Element (X)	Σ x²			Σ x																	

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

08-77

AUG
MONTH

PAGE 1 0600-0800
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
82/ 81												.1		.1				2	2				
80/ 79										.1	.1	.1						3	3				
78/ 77								.1	.2	.5	.3	.3	.3					12	12				
76/ 75							.1		.2	.5	.2		.1					11	11				
74/ 73								.4	.4	.6	.5	.2						21	21				
72/ 71						.1	.1	.1	.3	.5	.4	.1						16	16				
70/ 69						.1	.9	1.1	1.0	.4								32	32				
68/ 67					.4	.5	.3	1.3	1.4	.2	.4							43	43				
66/ 65			.1	.1	.3	1.4	1.0	2.0	.6	.6	.1							59	59				
64/ 63			.1	.6	1.2	1.7	2.2	2.0	1.1	.1								84	84	3			
62/ 61		.4	.6	1.0	1.6	1.4	1.9	1.5	.6									85	85	9	2		
60/ 59		.5	.6	1.8	2.0	1.8	1.3	.6	.2									84	84	22	6		
58/ 57		.9	1.0	2.7	1.3	2.0	1.2	.1	.2									87	87	50	6		
56/ 55		1.4	3.2	1.9	1.5	2.4	.5	.3										105	105	95	11		
54/ 53		2.3	2.8	1.0	1.5	1.3	.3	.1										86	86	121	32		
52/ 51		1.2	2.6	1.0	1.5	1.3	.2	.1										73	73	164	40		
50/ 49	.1	1.3	3.0	1.1	.6	.3	.1											61	61	138	95		
48/ 47		1.0	1.2	.4	.6	.3												33	33	115	105		
46/ 45		1.1	.4	.1	.1	.2												18	18	98	89		
44/ 43		.3	.4	.1	.1													9	9	56	96		
42/ 41		.2	.1	.2														5	5	32	82		
40/ 39																				20	95		
38/ 37		.1																1	1	4	81		
36/ 35																				3	68		
34/ 33																					46		
32/ 31																					30		
30/ 29																					14		
28/ 27																					17		
26/ 25																					11		
24/ 23																					3		
22/ 21																					1		
TOTAL	.1	10.6	16.2	12.0	12.9	14.9	10.1	9.9	6.3	3.2	2.2	.9	.4	.1				930	930	930			
																		930		930			
Element (X)	Σ X ²		Σ X		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature							Total					
Rel. Hum.	3442096		53792		57.8		18.868		930		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	93						
Dry Bulb	3264441		54653		58.8		7.529		930				14.0	4.9	.3		93						
Wet Bulb	2363005		46659		50.2		4.875		930								93						
Dew Point	1721519		39483		42.5		6.981		930			7.6					93						

FORM 0-26-5 (OL A) REVISD PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAF ETAC JUL 64

PSYCHROMETRIC SUMMARY

AUG
MONTH

0900-1100
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRQM AFB MT/GREAT FALLS

68-77

AUG
MONTH

YEARS

PAGE 1

1200-1400
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31		Dry Bulb	Wet Bulb	Dew Point	
106/105																		.1	1	1		
102/101																		.3	3	3		
100/ 99																		.1	1	1		
98/ 97																		.8	7	7		
96/ 95																		.8	7	7		
94/ 93																	.4	3.2	34	34		
92/ 91																.3	1.0	3.3	43	43		
90/ 89														.1	1.3	1.5	2.3	48	48			
88/ 87												.2	.4	.4	1.0	1.6	.8	41	41			
86/ 85											.4	.6	1.2	2.0	.9	.3	.3	51	51			
84/ 83									.1	.2	.3	.8	1.0	2.4	1.7	.1	.1	60	60			
82/ 81								.1	.2	.5	1.0	2.4	1.4	1.0	.3			64	64			
80/ 79							.5	.5	1.5	1.3	1.8	1.2	.1					65	65			
78/ 77							.3	.6	1.6	1.3	1.9	.4	.5	.1				64	64			
76/ 75						.3	.5	1.1	2.3	1.6	1.0	.5	.3					71	71			
74/ 73					.2	.1	.4	1.4	1.0	1.3	.4	.5	.1					51	51			
72/ 71					.1	.5	1.3	1.1	.9	1.3	.5	.2						55	55			
70/ 69				.1	.3	1.2	1.2	1.2	.9	1.0	.4							58	58			
68/ 67				.2	1.0	1.1	1.4	.4	.5	.3								46	46			
66/ 65				.4	.4	1.0	.8	.3	.5	.1								33	33	15		
64/ 63		.1	.3	.5	.6	.5	.3	.4										32	32	42		
62/ 61		.2	.3	.2	.1	.5	.6	.4										23	23	87	1	
60/ 59		.1	.1	.4	.8	.1	.2											16	16	168	5	
58/ 57			.2	.3	.5	.1	.1											12	12	208	5	
56/ 55		.2	1.1	.4	.2	.1												19	19	145	14	
54/ 53		.5	.6	.1														12	12	101	26	
52/ 51		.1	.6															7	7	86	35	
50/ 49		.3																3	3	48	74	
48/ 47			.3															3	3	22	89	
46/ 45																				6	100	
44/ 43																				2	85	
42/ 41																					95	
40/ 39																					98	
38/ 37																					64	
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature									
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total			
Dry Bulb																						
Wet Bulb																						
Dew Point																						

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2

1200-1400
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

AUG
MONTH

PAGE 1 1500-1700
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb		Wet Bulb	Dew Point			
104/103																	.3	3	3					
100/ 99																	.8	7	7					
98/ 97																	1.0	9	9					
96/ 95																	1.8	17	17					
94/ 93																.2	4.8	47	47					
92/ 91															.1	1.1	4.4	52	52					
90/ 89														.3		1.1	3.9	50	50					
88/ 87													.9	1.1	1.4	1.9	1.5	63	63					
86/ 85										.1		.1	.1	1.2	2.3	1.8	.6	58	58					
84/ 83										.6	.6	.6	.6	2.4	1.3	.9	.1	61	61					
82/ 81									.2	.2	.2	1.5	1.5	1.2	.6	.2		53	53					
80/ 79								.2	.2	.2	1.4	1.7	1.6	1.1	.9	.1		69	69					
78/ 77							.2	.1	.3	.8	1.8	.9	1.5	.4				54	54					
76/ 75							.1	.5	1.2	1.1	1.6	.5	.3	.4				57	57					
74/ 73							.1	.5	1.4	1.7	1.5	.5	.3	.2				59	59					
72/ 71				.1	.1	.1	.9	1.2	.8	.3	1.1	.2	.2					46	47					
70/ 69					.1	.6	1.1	1.0	1.0	.4	1.2	.3	.2					55	56					
68/ 67						.1	.5	.8	.4	.2	.2							21	21	1				
66/ 65			.1		.1	.4	1.2	.9	.4	.2	.1							32	32	19				
64/ 63		.3	1.1	.5	.4	.8	.2	.1	.1									33	33	39				
62/ 61			.1	.6	.4	1.0	.4	.1	.1	.1								27	27	87	4			
60/ 59			.2	.3	.3	.2												10	10	173	3			
58/ 57			.1	.1	.9	.1												11	11	224	5			
56/ 55		.2	.6	.2	.3	.1												14	14	135	11			
54/ 53		.4	.4	.1														9	9	110	27			
52/ 51			.4	.2														6	6	67	41			
50/ 49			.2															2	2	45	61			
48/ 47		.1																1	1	17	52			
46/ 45		.2																2	2	8	107			
44/ 43																				3	82			
42/ 41																					76			
40/ 39																					93			
38/ 37																					79			
36/ 35																					75			
Element (X)	Σ x ²		Σ x		Σ		σ _x		No. Obs.		Mean No. of Hours with Temperature						Total							
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F								
Dry Bulb																								
Wet Bulb																								
Dew Point																								

USAFETAC FORM 0-26-5 (OL A) JUL 64

PSYCHROMETRIC SUMMARY

YEARS

AUG
MONTH

PAGE 2

1500-1700
HOURS (L. G. T.)

[illegible]

USAFETAC
FORM 0-26-5 (11L A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

AUG

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1800-2000

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point					
102/ 101																		.1	1	1					
100/ 99																		.1	1	1					
96/ 95																		.3	3	3					
94/ 93																	.2	.6	8	8					
92/ 91																	.3	1.9	21	21					
90/ 89																.3	.9	1.0	20	20					
88/ 87													.3		1.2	1.6	.9	.9	37	37					
86/ 85													.3	.6	1.4	1.1	.1	.1	33	33					
84/ 83											.1	.1	.6	1.3	2.0	.3	.3	.3	45	45					
82/ 81								.1		.3	.6	.6	1.0	2.5	1.1	.8			65	65					
80/ 79								.1	.1	.2	.8	1.1	2.0	1.3	.1	.1			54	54					
78/ 77								.2	.5	.9	1.4	2.5	.6	.5	.1				63	63					
76/ 75								.1	.8	.5	.5	1.4	1.0	.4					44	44					
74/ 73						.1	.2	1.0	1.4	2.2	1.4	1.0	.3						70	72					
72/ 71					.3		.4	1.1	1.2	1.7	1.2	.6	.2						63	63					
70/ 69				.1	.3	.4	.8	1.4	1.9	1.2	.3	.4	.1						65	66					
68/ 67					.4	.4	1.5	1.5	.9	.8	1.0								60	60	1				
66/ 65			.2		.3	.6	.8	.9	.9	.3	.5								42	42	3				
64/ 63		.4	.1	1.1	.9	1.4	.9	.8	.6	.3									60	60	23				
62/ 61			.6	1.1	.8	1.0	.4	.2	.5	.1									44	44	48				
60/ 59			.9	1.3	1.5	.3	.2	.3	.1	.1									44	44	94				
58/ 57		.3	.5	.5	.9	.2	.1		.1										25	25	179				
56/ 55		.4	.3	.6	.5	.3	.1	.1											23	23	193				
54/ 53		.1	.2	.5	.2														10	10	144				
52/ 51		.6	.6	.2	.2														16	16	106				
50/ 49		.1	.3																4	4	59				
48/ 47		.3																	3	3	47				
46/ 45		.2																	3	3	23				
44/ 43																					4				
42/ 41																					3				
40/ 39																									
38/ 37																									
36/ 35																									
34/ 33																									
Element (X)	Σ x ²		Σ x		x̄		s _x		No. Obs.		Mean No. of Hours with Temperature										Total				
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F									
Dry Bulb																									
Wet Bulb																									
Dew Point																									

USAFETAC FORM 0-26-5 (OL A) JUL 64

REVISOR PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

MONTH

1800-2000
HOURS (L S T)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

MONTH

2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31		Dry Bulb	Wet Bulb	Dew Point
88/ 87																.1		1	1		
82/ 81											.1	.2		.2		.1		5	5		
80/ 79									.1	.1		.3	.6	.1	.2	.1		15	15		
78/ 77										.1	.1	.3	.5	.2	.1			13	13		
76/ 75							.1			.3	.6	1.0		.2	.1			22	22		
74/ 73						.1	.3	.2	1.0	.5	1.5	.4	.5					43	43		
72/ 71						.3	.3	.5	.6	1.6	1.5	.2	.5					53	53		
70/ 69					.2	.4	.9	.8	1.7	3.0	1.0	.3						77	77		
68/ 67			.3	.6	1.0	1.0	1.3	1.5	1.4	.1	.1							68	69		
66/ 65		.1	.1	.4	2.3	1.8	1.6	1.4	.8	.6								85	86		
64/ 63	.2	.1	.4	1.1	1.8	1.4	2.6	1.1	.4									85	86	5	
62/ 61	.8	.2	.2	1.3	.6	1.7	1.3	1.0	.6									72	72	16	
60/ 59	.4	.9	2.2	1.6	1.7	1.4	1.1	.5	.1									92	92	31	
58/ 57	.9	2.6	1.9	1.7	1.0	1.1	1.2											96	96	57	
56/ 55	.8	1.3	2.3	1.3	.4	.6	.4	.1										67	67	122	
54/ 53	.9	1.6	1.3	.8	.8	.4	.2											55	55	166	
52/ 51	.9	.5	1.1	.2	.2	.2	.1											30	30	167	
50/ 49	.9	.6	.2	.1	.6													23	25	138	
48/ 47	.6	.6	.2	.3	.1													18	18	89	
46/ 45	.5			.1	.1													7	7	64	
44/ 43																				43	
42/ 41																				16	
40/ 39																				10	
38/ 37																				3	
36/ 35																					
34/ 33																					
32/ 31																					
30/ 29																					
28/ 27																					
26/ 25																					
24/ 23																					
22/ 21																					
20/ 19																					
Element (X)	Σx^2		Σx		\bar{x}		σ_x		No. Obs.												

PSYCHROMETRIC SUMMARY

PAGE 2

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26.5 (0! A)

How

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRQM AFB MT/GREAT FALLS

68-77

AUG
MONTH

PAGE 1

ALL
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL				
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
106/105																		.0	1.	1			
104/103																		.0	3	3			
102/101																		.1	4	4			
100/ 99																		.1	10	10			
98/ 97																		.2	16	16			
96/ 95																	.0	.4	28	28			
94/ 93																	.1	1.1	90	90			
92/ 91																	.3	1.2	119	119			
90/ 89															.0	.1	.3	.5	.9	134	134		
88/ 87												.0	.2	.3	.6	.7	.4	.4	159	159			
86/ 85										.0	.1	.2	.4	.8	.8	.5	.1	.1	164	164			
84/ 83										.0	.1	.3	.4	.8	.8	.2	.1	.1	201	201			
82/ 81								.0	.0	.1	.3	.7	.8	.8	.4	.2			240	240			
80/ 79								.1	.1	.2	.6	.7	1.0	.5	.2	.0			251	251			
78/ 77								.1	.3	.5	.9	.9	.5	.2					262	262			
76/ 75							.1	.2	.6	.8	.8	.7	.3	.2					269	269			
74/ 73						.1	.1	.5	1.0	1.1	1.1	.4	.2	.0					342	344			
72/ 71				.0	.1	.1	.4	.8	.8	1.0	.8	.3	.2						330	331			
70/ 69				.0	.1	.4	.9	1.1	1.1	1.1	.5	.3	.0						409	411			
68/ 67			.0	.1	.3	.5	.8	1.1	.9	.5	.3	.0							343	344	2		
66/ 65			.1	.1	.5	1.0	1.3	1.1	.8	.5	.2								420	421	43		
64/ 63		.1	.1	.7	.8	1.2	1.2	1.4	.8	.3	.0								487	488	127		
62/ 61		.3	.3	.6	1.0	.9	1.2	.9	.5	.1									438	438	315	10	
60/ 59		.3	.6	1.2	1.3	1.2	.9	.6	.2	.0									471	471	657	48	
58/ 57		.4	1.0	1.2	1.1	1.0	.9	.3	.1										446	446	931	50	
56/ 55		.8	1.4	1.4	1.1	1.1	.5	.2	.0										490	490	979	100	
54/ 53		1.1	1.4	.9	1.0	.7	.2	.1											405	405	977	255	
52/ 51	.0	.9	1.4	.8	.8	.5	.2	.1											345	345	913	340	
50/ 49	.0	.7	1.5	.4	.3	.4	.1												255	255	813	561	
48/ 47		.4	.7	.3	.3	.2	.0												143	143	624	687	
46/ 45		.5	.3	.2	.2	.1	.0												97	97	473	759	
44/ 43		.2	.2	.1	.0														36	36	266	715	
42/ 41		.1	.0	.0	.0														14	14	158	656	
40/ 39		.1		.0															9	9	99	721	
Element (X)	Σ x ²		Σ x		x̄		σ _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total						
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHOMETRIC SUMMARY

68-77

YEARS

AUG

PAGE 2

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC
FORM
M 11 44
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

PAGE 1

0000-0200
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Eulb	Dew Point					
78/ 77													.1					1	1						
74/ 73												.1						1	1						
72/ 71											.2	.1						3	3						
70/ 69							.1				.2	.1						4	4						
68/ 67						.2	.1	.1		.3	.1	.1						9	9						
66/ 65						.3	.2	.4	.1	.2								12	12						
64/ 63						.2	.4	.3	.4	.2								15	15						
62/ 61				.2	.4	.6	.6	.7	.1									23	23						
60/ 59				.3	.6	.6	1.2	.3	.3									30	30						
58/ 57			.3	1.0	1.1	1.9	1.2	.2		.1								53	53	6					
56/ 55		.1	1.0	1.0	1.3	1.9	1.4	.3	.2									66	66	4					
54/ 53		.1	.7	1.3	2.1	1.9	.9	.2										65	65	24					
52/ 51			1.1	1.9	3.0	2.0	1.4											85	85	45	8				
50/ 49		.3	1.2	3.0	3.0	1.2	.3											82	82	54	15				
48/ 47		1.8	1.7	3.2	2.8	.7	.4											95	95	79	18				
46/ 45		1.4	2.2	2.2	1.9	.8												77	77	111	39				
44/ 43		1.8	2.2	2.1	1.1													65	65	114	52				
42/ 41		1.0	1.3	1.8	.2													39	39	122	53				
40/ 39		1.1	4.0	1.8														62	62	96	78				
38/ 37	.3	1.0	2.2	.2														34	34	62	85				
36/ 35	.2	.9	.3	.7														19	19	79	111				
34/ 33	.4	.9	1.2	.1														24	24	39	85				
32/ 31		.6	1.0	.1														15	15	16	94				
30/ 29		1.1	.4															14	14	24	80				
28/ 27		.2	.1															3	3	17	82				
26/ 25		.3																3	3	6	40				
24/ 23		.1																1	1	2	20				
22/ 21																					33				
20/ 19																					6				
18/ 17																					1				
TOTAL	1.0	12.8	21.1	21.0	17.6	12.2	8.4	2.7	1.2	.9	.6	.4	.1					900	900	900	900				
Element (X)	Σ x ²		Σ x		x̄		s _x		No. Obs.		Mean No. of Hours with Temperature														
Rel. Hum.	3638677		55327		61.5		16.253		900		≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F									
Dry Bulb	2173933		43539		48.4		8.675		900			3.6	1.8	.2					90						
Wet Bulb	1619360		37752		41.9		6.310		900			6.5							90						
Dew Point	1126992		31234		34.7		6.919		900			35.6							90						

PSYCHROMETRIC SUMMARY

YFAPS

MONTH

0300-0500

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL			
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
72/ 71											.1							1	1				
70/ 69											.1	.2						3	3				
68/ 67										.1								1	1				
66/ 65					.3	.3			.1	.2	.1							10	10				
64/ 63					.3	.4	.3		.3	.1								14	14				
62/ 61					.4	.4	.6	.4	.4									21	21				
60/ 59					.7	.1	.9	.4	.2									21	21				
58/ 57			.2	.8	1.1	.3	.9	.1										31	31	5			
56/ 55		.1	.4	1.8	.8	1.8	.9		.1	.2								55	55	5			
54/ 53			.6	1.1	1.8	1.4	.6		.1									50	50	15			
52/ 51		.1	.8	1.4	2.7	1.1	.4	.1										60	60	29	5		
50/ 49		.1	2.2	2.9	2.6	1.2	.3											84	84	38	12		
48/ 47		2.2	2.3	3.4	1.7	1.1	.1											98	98	58	16		
46/ 45	.1	1.8	2.2	3.1	2.0	.7												89	89	115	42		
44/ 43	.1	1.8	2.2	2.0	1.0													64	64	106	41		
42/ 41		1.9	2.8	2.0	.4													64	64	114	62		
40/ 39	.1	1.4	3.9	.9	.1													58	58	94	59		
38/ 37	.2	1.0	3.2	1.0														49	49	85	88		
36/ 35	.2	1.8	1.1	.8														35	35	73	117		
34/ 35	.6	2.1	1.3	.2														38	38	56	83		
32/ 31	.2	.9	1.3															22	22	48	87		
30/ 29	.1	.9	.8															16	16	24	99		
28/ 27		.8	.3															10	10	25	82		
26/ 25		.3	.1															4	4	2	37		
24/ 23		.2																2	2	7	30		
22/ 21																				1	23		
20/ 19																					10		
18/ 17																					3		
16/ 15																					4		
TOTAL	1.7	17.4	25.9	21.4	15.9	9.0	5.0	1.1	1.3	.7	.3	.2						900		900	900		
																		900		900			
Element (X)	Σ X ²		Σ X		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.	4040754		58596		65.1		15.847		900		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb	1988816		41594		46.2		8.602		900				5.4		.5								90
Wet Bulb	1525987		36593		40.7		6.467		900				10.7										90
Dew Point	1098237		30817		34.2		6.918		900				37.5										90

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

SEP

PAGE 1 0900-1100
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																			TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
86/ 85																.1	.1		2	2			
82/ 81								.1			.1	.1	.1	.3				7	7				
80/ 79											.2	.1	.7	.3	.1			13	13				
78/ 77								.1	.1	.1	.1	.3	.6	.1	.1			14	14				
76/ 75									.2	.7	.9	1.1	.3					29	29				
74/ 73							.1	.1	.1	.3	.7	.9	.7					26	26				
72/ 71							.2	.2	.9	1.9	1.7	.4						48	48				
70/ 69						.1	.2	1.1	.3	2.2	.6	.6						46	46				
68/ 67						.2	.3	1.1	2.0	1.3	.7							51	51	1			
66/ 65					.2	.3	1.7	1.8	1.6	.4	.1							55	55				
64/ 63					.3	.6	1.1	1.7	1.4	.6		.2						53	53	1			
62/ 61					.1	.9	2.3	2.2	.8	.2								59	59	5			
60/ 59				.1	1.1	2.0	2.8	1.6	.4	.1	.1							74	74	11	1		
58/ 57			.3	.6	1.0	2.8	1.6	.7	.1									63	63	25			
56/ 55			.2	.6	1.6	1.8	1.6	.6	.1									57	57	58	2		
54/ 53			.1	.9	1.6	2.1	1.1	.2										54	54	86	2		
52/ 51			.9	.8	1.1	1.0	.7	.3										43	43	116	6		
50/ 49		.8	1.1	1.1	1.4	.9	.2											50	50	127	22		
48/ 47		.7	1.7	.7	.8	.4												38	38	124	20		
46/ 45		.9	.8	1.0	.9	.3	.2											37	37	95	55		
44/ 43		.7	.4	.6		.1												16	16	78	63		
42/ 41		.3	.2	.1	.2													9	9	63	77		
40/ 39		.1	.6	.4														10	10	29	115		
38/ 37		.1	.8	.2														10	10	18	120		
36/ 35	1.1	.3																13	13	12	105		
34/ 33	.6	.2	.1															8	8	27	74		
32/ 31	.8	.4	.1															12	12	11	73		
30/ 29	.2	.1																3	3	8	55		
28/ 27																				5	56		
26/ 25																					23		
24/ 23																					10		
22/ 21																					11		
20/ 19																					5		
18/ 17																					3		
Element (X)	Σ X ²		Σ X		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature							Total					
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total						
Dry Bulb																							
Wet Bulb																							
Dew Point																							

PSYCHROMETRIC SUMMARY

YEARS

SEP
MONTH

PAGE 2 0900-1100
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26.5 (0! A)

USAFETAC

PSYCHROMETRIC SUMMARY

YEARS

1200-1400
HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26-5 (O.L.A.) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

PAGE 1

1500-1700
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
96/ 95																	.1	1	1		
94/ 93																	.2	2	2		
92/ 91																	.6	5	5		
90/ 89																	.1	2	2		
88/ 87														.2	.2	.2		6	6		
86/ 85											.2	.2	.1	.3	.6	.3	.3	19	19		
84/ 83											.3	.1	.7	.4	.4	.9	.3	29	29		
82/ 81											.3	.3	.6	.9	2.3	1.0	.2	51	51		
80/ 79										.1	.1	.7	.3	2.8	.8	.1	.1	45	45		
78/ 77									.2	.8	.4	1.1	2.1	1.3	.7	.2		60	60		
76/ 75								.2	.7	.7	.7	1.8	1.6	.7	.1	.1		52	52		
74/ 73								.2	.4	.9	1.3	1.2	1.1	.2				49	49		
72/ 71								.4	.9	1.3	.8	1.4	.4	.1				49	49		
70/ 69							.4	.4	1.6	1.3	1.8	1.3	.6					67	67		
68/ 67						.1	.2	.9	1.8	1.9	.8							51	51		
66/ 65					.1	.3	.8	.8	2.3	1.9	.7							60	60	3	
64/ 63					.3	.2	.8	1.7	1.2	1.1	.7	.2						56	56	4	
62/ 61					.3	.2	.2	2.0	1.7	1.8								54	54	13	
60/ 59				.2	.4	.3	.4	.7	.4	.2	.2							27	27	30	
58/ 57			.1	.2	.4	.3	.9	1.3	.1	.1								30	30	53	
56/ 55			.2	.4	.6	.7	.8	.2	.7									32	32	86	
54/ 53			.4	.6	.6	1.0	.6	.6	.1									34	34	150	
52/ 51		.2	.9	.6	.1	.4												20	20	114	13
50/ 49		.3	.4	.3	.1	.2	.2	.2										17	17	121	21
48/ 47			.1	.6	.8	.4	.3											20	20	95	20
46/ 45		.6	.1	.2	.6	.4	.1											18	18	77	35
44/ 43			.3	.1														4	4	46	58
42/ 41			.2	.2														4	4	20	58
40/ 39			1.1	.2														12	12	31	64
38/ 37		.3	.2	.1														6	6	12	62
36/ 35		.6		.9														13	13	27	83
34/ 33		.4																4	4	4	116
32/ 31	.1																	1	1	9	112
30/ 29																			5		70
Element (X)	Σ X ²		Σ X		X		σ _x		No. Obs.		Mean No. of Hours with Temperature										
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total				
Dry Bulb																					
Wet Bulb																					
Dew Point																					

PSYCHROMETRIC SUMMARY

68-77

YEARS

SEP
MONTH

PAGE 2 1500-1700
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

SEP

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1800-2000

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
92/ 91																	.2	2	2					
88/ 87																	.1	2	2					
86/ 85																	.1	1	1					
84/ 83														.3				3	3					
82/ 81											.1	.1	.1	.1	.2			6	6					
80/ 79										.1	.2	.4	.4	.1				12	12					
78/ 77									.1	.1	.2	.2	.4	.2	.2			14	14					
76/ 75								.1	.6	.4	.3	.4	.3	.3				23	23					
74/ 73								.3	.4	.8	.8	1.3	.6					38	38					
72/ 71							.2	.2	.4	.6	1.0	.7	.2					30	30					
70/ 69							.2	.6	1.0	1.3	1.1	.7	.2					46	46					
68/ 67						.1	.3	1.3	.9	.9	.8	.2						41	41					
66/ 65						.3	.7	1.3	1.3	.9	.7	.1						48	48					
64/ 63				.2	.1	.2	.9	2.4	2.6	1.0	.2	.1						70	70					
62/ 61					.8	1.0	1.9	1.4	1.4	1.2	.1							71	71	5				
60/ 59				.2	.7	1.9	3.1	1.6	1.4	.1								81	81	16				
58/ 57			.1	.2	.7	1.4	2.1	1.7	.6									61	61	24				
56/ 55		.2	.3	.4	.6	1.2	2.6	.7	.2									56	56	44				
54/ 53			.8	.6	.6	1.7	1.2	.4	.3									50	50	76	2			
52/ 51		.1	.9	1.0	1.7	.8	.4	.1										45	45	97	9			
50/ 49		.6	.9	.2	.9	.6	.2											30	30	134	19			
48/ 47		.3	.4	.4	1.9	.9	.3											39	39	110	33			
46/ 45		1.0	.4	1.0	1.1	1.1												42	42	105	41			
44/ 43			.9	.7	.3	.6												22	22	85	51			
42/ 41		.2	.1	.3	.1													7	7	51	64			
40/ 39		.4	1.1	.1	.2													17	17	51	64			
38/ 37	.1	.1	.9	.2	.2													14	14	28	77			
36/ 35		.4	.1	.1														6	6	30	83			
34/ 33	.1	1.2	.6	.1														18	18	18	110			
32/ 31		.2	.3															5	5	14	107			
30/ 29																				10	57			
28/ 27																				2	65			
26/ 25																					42			
24/ 23																					33			
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature										Total	
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total					
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

68-77

SEP

MONTH

PAGE 2

1800-2000

HOURS (L, S, T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
YEARS

SEP
MONTH

PAGE 1

2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																											TOTAL D.B./W.B.	TOTAL						
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
78/ 77																																2	2		
74/ 73										.1		.3	.1																			5	5		
72/ 71							.2	.1	.2	.1																						6	6		
70/ 69							.2	.2	.1	.1	.7	.1																				13	13		
68/ 67						.3	.2	.4	.3	.7	.1																					19	19		
66/ 65					.2	.3	.4	.3	.9	.8																						27	27		
64/ 63						.4	.4	1.2	.9	.8	.2																					36	36		
62/ 61				.1	.6	.4	1.1	1.1	.7	.1																						37	37		
60/ 59				.6	1.2	1.8	1.7	.8	.6		.1																					60	60	4	
58/ 57			.3	.8	1.6	1.9	1.4	1.1	.1																							65	65	6	
56/ 55		.1	.7	1.3	1.6	2.0	2.0	.9	.2																							79	79	16	
54/ 53		.1	.3	1.7	1.6	2.7	2.6	.6																								85	85	33	2
52/ 51		.3	.8	1.6	1.8	2.2	.6	.2																								67	67	49	10
50/ 49		.3	1.3	2.7	2.3	2.3	.6	.2																								88	88	97	19
48/ 47		1.6	2.0	1.7	1.1	.4	.3																									64	64	105	18
46/ 45		.8	1.0	1.7	1.3	.2																										45	45	111	49
44/ 43		.7	1.8	1.4	1.1	.1																										46	46	124	55
42/ 41		.8	.8	1.3	.9																											34	34	88	58
40/ 39		.6	2.1	.9	.6																											37	37	76	74
38/ 37	.3	.8	1.0	.3																												22	22	51	73
36/ 35		.6	.6	.2																												12	12	53	105
34/ 33	.4	1.1	.9	.1																												23	23	33	80
32/ 31		.6	1.1																													15	15	21	95
30/ 29		.7	.1																													7	7	13	70
28/ 27	.2	.3																														5	5	18	81
26/ 25		.1																														1	1	2	51
24/ 23																																			19
22/ 21																																			23
20/ 19																																			17
18/ 17																																			1
TOTAL	1.0	9.3	14.8	16.3	15.8	15.2	11.8	7.2	4.0	2.7	1.1	.4	.1	.2																		900	900	900	900
Element (X)	Σ x ²					Σ x					Σ					No. Obs.					Mean No. of Hours with Temperature										Total				
Rev. Num.	3096325					50343					55.917.658					900					≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F									
Dry Bulb	2465245					46339					51.59.395					900						2.8	4.5	.7											
Wet Bulb	1739437					39139					43.56.447					900						3.4													
Dew Point	1140865					31371					34.97.259					900						35.7													

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

YEARS

SEP

MONTH

PAGE 1

ALL

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point
96/ 95																	.0	2	2	
94/ 93																	.0	3	3	
92/ 91																	.1	9	9	
90/ 89																.0	.0	5	5	
88/ 87															.0	.0	.0	11	11	
86/ 85											.1	.0	.0	.1	.1	.1	.1	31	31	
84/ 83									.0	.1	.1	.1	.1	.1	.1	.2	.0	55	55	
82/ 81								.0	.0	.1	.1	.2	.3	.5	.2	.0	.0	101	101	
80/ 79									.0	.1	.2	.4	.6	.2	.0	.0	.0	112	112	
78/ 77								.0	.0	.1	.3	.8	.3	.2	.0	.0	.0	141	141	
76/ 75								.0	.2	.3	.4	.8	.4	.2	.0	.0	.0	162	162	
74/ 73							.0	.1	.2	.4	.6	.6	.4	.1	.0	.0	.0	176	176	
72/ 71							.1	.2	.5	.7	.7	.5	.1	.0			.0	201	201	
70/ 69						.0	.2	.4	.6	.8	.7	.5	.1				.0	234	234	
68/ 67					.1	.3	.6	.8	1.1	.8	.5	.1	.0				.0	227	227	1
66/ 65					.2	.4	.7	1.3	1.2	.7	.2	.1					.0	282	282	9
64/ 63			.0	.2	.4	.7	1.3	1.2	.7	.2	.1						.0	346	346	8
62/ 61			.1	.4	.6	1.1	1.3	.8	.5	.0							.0	339	339	35
60/ 59			.0	.3	.7	1.0	1.5	.9	.7	.1	.1						.0	373	374	79
58/ 57			.2	.6	.9	1.3	1.2	.8	.2	.1							.0	378	378	165
56/ 55		.1	.5	.9	1.0	1.4	1.4	.5	.3	.0							.0	434	435	327
54/ 53		.0	.4	1.0	1.4	1.8	1.1	.3	.1								.0	438	438	565
52/ 51		.2	.9	1.2	1.7	1.2	.5	.1									.0	416	416	598
50/ 49		.4	1.2	1.6	1.5	1.0	.3	.1									.0	436	436	750
48/ 47		1.0	1.4	1.8	1.3	.6	.2										.0	461	461	735
46/ 45	.0	1.1	1.1	1.6	1.2	.5	.0										.0	404	404	787
44/ 43	.0	1.0	1.3	1.2	.5	.1											.0	292	292	742
42/ 41	.7	1.0	.9	.4													.0	215	215	607
40/ 39	.0	.6	1.9	.6	.2												.0	242	242	475
38/ 37	.1	.6	1.4	.3	.0												.0	180	180	331
36/ 35	.1	.9	.6	.4													.0	148	148	342
34/ 33	.3	1.1	.8	.1													.0	159	159	248
32/ 31	.0	.5	.7	.0													.0	90	90	167
30/ 29	.1	.9	.2														.0	53	53	113
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature						Total	
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F		
Dry Bulb																				
Wet Bulb																				
Dew Point																				

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2

ALL

HOURS (L, S, T.)

[illegible]

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PSYCHROMETRIC SUMMARY:

PAGE 1 0000-0200
HOURS (L. S. T.)

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

68-77

DC

PAGE 2 0000-0200
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

QCT
MONTH

0300-0500

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

68-77

DC T

YEARS

MONTH

0600-0800

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

68-77

QCT
MONTH

PAGE 2 0600-0800
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 68-77 DCT
STATION STATION NAME YEARS MONTH
PAGE 1 0900-1100
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL D.B./W.B.	TOTAL					
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
80/ 79														.1					1	1															
78/ 77													.2	.1					3	3															
76/ 75												.1	.2		.4	.1			8	8															
74/ 73												.1	.3	.6					10	10															
72/ 71												.1	.8	.2					10	10															
70/ 69										.1	.3	1.7	.5	.1					26	26															
68/ 67										.3	.5	1.3	.1						21	21															
66/ 65										.3	1.2	.9	.6						28	28															
64/ 63										.5	1.9	.6	.4						33	33															
62/ 61								.2	1.0	1.5	.3	.1							29	29															
60/ 59					.1	.1	1.0	1.7	1.0	.1									37	37															
58/ 57					.2	.6	1.8	1.4	.2	.6									46	46															
56/ 55				.1	.2	2.4	1.1	1.0	.2										46	46										1					
54/ 53				.1	.5	1.8	2.3	.5	.1										50	50										9					
52/ 51				.2	.5	3.0	1.8	.3											55	55										27					
50/ 49			.3	.3	1.4	1.8	1.1	.1											47	47										68					
48/ 47			.1	.6	1.7	2.0	1.2	.1											54	54										75					
46/ 45		.5	.4	1.2	3.2	.8	.5												62	62										91	3				
44/ 43		.5	.5	2.0	1.3	1.2	.1												53	53										69	4				
42/ 41		.6	1.2	1.1	.6	1.0	.1												43	43										86	10				
40/ 39		.6	1.7	1.9	1.1	.4													54	54										92	30				
38/ 37		1.8	1.3	.8	.5	.1													42	42										99	21				
36/ 35	.1	1.3	1.4	.3	.2														31	31										71	93				
34/ 33	.2	1.3	.9	.3	.1														26	26										58	90				
32/ 31	.5	1.4	.8	.5	.1														31	31										59	112				
30/ 29	.4	1.1	.8	.1															22	22										36	117				
28/ 27	.5	1.1	.4																19	19										29	134				
26/ 25	.5	.8	.1																13	13										20	93				
24/ 23	.4	.6																	10	10										17	58				
22/ 21	.1	.2	.1																4	4										4	43				
20/ 19	.4	.3																	7	7										7	40				
18/ 17																														3	35				
16/ 15		.3																	3	3										1	17				
14/ 13	.1	.1																	2	2										4	13				
Element (X)	Σ x'			Σ x			x̄			s _x			No. Obs.			Mean No. of Hours with Temperature																			
Rel. Hum.																≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total													
Dry Bulb																																			
Wet Bulb																																			
Dew Point																																			

PSYCHROMETRIC SUMMARY

OCT
MONTH

HOURS (L, S, T)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL	TOTAL					
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point		
82/ 81														.2	.5	.2		9	9				
80/ 79													.2	.1	.4	.2		9	9				
78/ 77												.1	.2	1.3	.6			21	21				
76/ 75												.2	.9	1.0				19	19				
74/ 73											.3	.8	1.0	.5				24	24				
72/ 71										.2	.4	1.3	.4	.1				23	23				
70/ 69										1.4	1.5	1.4	.3					43	43				
68/ 67									.3	2.0	.8	.3	.1					33	33				
66/ 65								.6	.6	1.8	.6	.6						41	41				
64/ 63							.1	.5	1.2	1.6	.8	.3						42	42				
62/ 61						.2	.6	.5	1.7	.5	.3	.1						38	38				
60/ 59						.1	.6	1.7	1.5	.4								41	41				
58/ 57					.2	.1	.9	2.9	.5	.3								46	46				
56/ 55					.5	1.4	2.9	2.3	.6	.1								73	73	10			
54/ 53				.1	.2	1.0	2.9	2.5	.4									66	66	21			
52/ 51					.5	.9	3.8	1.3	.1									61	61	77			
50/ 49				.1	1.1	1.7	1.4	.3										43	43	95			
48/ 47			.2	.4	.9	1.2	1.3											37	37	65			
46/ 45		.3	.8	1.0	1.3	1.2	.6	.3										51	51	89			
44/ 43			.6	1.1	.6	.3	.5											30	30	99	3		
42/ 41		.4	.5	.3	.6	.5	.3											26	26	104	10		
40/ 39		.2	1.4	.6	.3	.2	.1											27	27	107	27		
38/ 37		.9	1.1	.2	.4													24	24	63	39		
36/ 35		.3	1.0	.5														17	17	51	52		
34/ 33	.3	.5	.4	.8														19	19	31	87		
32/ 31	.4	1.1	.1	.3														18	18	34	115		
30/ 29	.2	1.1	.1															13	13	34	118		
28/ 27	.1	1.4	.2	.2														18	18	22	126		
26/ 25	.1	.6	.2															9	9	10	99		
24/ 23																				8	78		
22/ 21																				1	45		
20/ 19		.3																3	3	2	52		
18/ 17		.3																3	3	1	28		
16/ 15		.2																2	2	3	22		
Element (X)	Σ x ²		Σ x		x̄		s _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.											≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																							
Wet Bulb																							
Dew Point																							

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PSYCHROMETRIC SUMMARY

OCT
MONTH

PAGE 2 1200-1400
HOURS (L. S. T.)

FORM 0-26.5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE
JUL 64

USAFETAC

PSYCHROMETRIC SUMMARY

68-77

YEARS

PAGE 1

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0-26.5 (01 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

68-77

YEARS

OCT
MONTH

PAGE 2 1500-1700
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

NC T

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1800-2000

HOURS (L E T)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
74/ 73													.1					1	1					
72/ 71											.2	.1	.3					6	6					
70/ 69											.3	.4						7	7					
68/ 67									.1	.2	.2							5	5					
66/ 65									.1	.1	.4	.5						11	11					
64/ 63									1.3	1.2	.4	.1						28	28					
62/ 61								.3	1.1	1.7	.9	.1						38	38					
60/ 59							.1	.5	1.2	1.3	.2							31	31					
58/ 57						.3	2.2	1.1	.3	.1								37	37					
56/ 55				.1	.2	1.4	1.2	1.4	.6	.1								47	47					
54/ 53			.1		1.4	2.0	1.5	.5	.2	.1								55	55					
52/ 51			.1		.9	2.2	1.4	1.1	.1									53	53	7				
50/ 49			.1	.8	1.6	1.8	1.3	.3										55	55	30				
48/ 47		.1	.6	1.1	1.8	2.5	1.1											67	67	49				
46/ 45		.2	1.1	.6	3.2	1.8	.4											69	69	89	1			
44/ 43		.2	1.0	2.9	1.7	1.4												67	67	88	3			
42/ 41		.5	1.1	1.8	1.3	.8	.1											52	52	90	6			
40/ 39		1.4	2.4	2.2	.6	.3	.1											65	65	88	17			
38/ 37			.8	1.5	.8	.5												44	44	122	43			
36/ 35		.9	1.4	1.2	.5													37	37	93	53			
34/ 33	.1	1.6	.9	1.1	.6													40	40	55	104			
32/ 31	.3	1.6	.6	.4	.2													30	30	59	115			
30/ 29		1.0	.5	.2														16	16	48	79			
28/ 27	.4	1.7	.3															23	23	42	123			
26/ 25	.1	1.5	.4															19	19	25	93			
24/ 23	.1	1.0																10	10	21	72			
22/ 21	.3	.2																5	5	11	70			
20/ 19		.1																1	1	1	58			
18/ 17		.1																1	1	1	32			
16/ 15	.1	.3																4	4	5	22			
14/ 13																					10			
12/ 11	.1	.1																2	2	2	7			
10/ 9																								

PSYCHROMETRIC SUMMARY

68-77

OCT
MONTH

PAGE 2 1800-2000
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
6/ 5	.1																	1	1	1	1	
4/ 3	.1																	1	1	1	1	
2/ 1																					2	
0/ -1																					1	
TOTAL	1.9	13.9	11.3	14.0	14.9	15.2	10.1	8.1	5.7	2.5	1.5	.5	.4					930	930	930	930	

PSYCHROMETRIC SUMMARY

YEARS

MONTH

2100-2300

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
68/ 67												.3						3	3					
66/ 65										.1	.1							2	2					
64/ 63									.1	.2	.1	.1	.2					7	7					
62/ 61									.9	.3	.1							12	12					
60/ 59						.1	.4	1.0	.6									20	20					
58/ 57						.3	.5	1.2	.6									25	25					
56/ 55					.1	1.1	1.7	1.0										36	36					
54/ 53			.1		.6	1.4	1.3	.3	.1									37	37					
52/ 51			.2	.3	1.4	2.3	1.3	.3										54	54					
50/ 49			.1	.4	2.7	1.3	.4	.1										47	47	4				
48/ 47				1.6	2.6	1.3	1.1											61	61	27				
46/ 45			.6	1.3	2.8	1.0	.1											54	54	46				
44/ 43		.4	.8	2.5	2.7	1.2												70	70	81				
42/ 41	.2	.4	1.6	2.5	1.8	.3												64	64	95				
40/ 39		1.2	1.9	2.3	1.2													61	61	78				
38/ 37	.1	1.7	2.4	1.6	1.1													64	64	101				
36/ 35	.4	1.8	3.0	1.5	.4	.1												68	68	111				
34/ 33	.1	1.7	1.6	1.6	.3													50	50	73				
32/ 31	.3	2.2	1.9	.6	.5													52	52	80				
30/ 29		3.0	1.4	.5	.1													47	47	61				
28/ 27	.6	1.4	.6															25	25	59				
26/ 25	.3	1.6	.5	.1														24	24	39				
24/ 23	.5	1.4	.1															19	19	32				
22/ 21	.5	.9																13	13	23				
20/ 19		.2																2	2	7				
18/ 17																				40				
16/ 15		.4																4	4	3				
14/ 13		.2																2	2	2				
12/ 11		.1																1	1	2				
10/ 9																				13				
8/ 7																				3				
6/ 3																				2				
4/ 3	.1	.1																2	2	1				
2/ 1	.3	.1																4	4	4				
Element (X)	Σx^2																							

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2 2100-2300
HOURS (L. S. T.)

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

DCT

MONTH

ALL

HOURS (L, S, T.)

[illegible]

USAFETAC
FORM
JUL 64
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

QCT
MONTH

STATION

STATION NAME

YEARS

MONTH

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

68-77

NOV

MONTH

PAGE 1

0000-0200

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL				
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
60/ 59										.1								1	1					
58/ 57								.1	.2									3	3					
56/ 55							.7	.3	.1	.1								11	11					
54/ 53					.2	.2	.6	.1	.4									14	14					
52/ 51						.8	.7	.4										17	17					
50/ 49				.3	.8	.6	.7	.6										26	26					
48/ 47				.2	.9	.9	.7	.2										26	26					
46/ 45			.1	1.1	1.7	1.7	.2											43	43	4				
44/ 43			.7	.8	2.1	1.4	.1											46	46	14				
42/ 41		.3	.7	2.0	1.6	.3	.2											46	46	33				
40/ 39		.3	1.1	1.9	1.6	1.3												56	56	44	1			
38/ 37		.6	.6	2.1	.8	.3												39	39	53	6			
36/ 35	.1	.4	1.4	2.2	1.0	.2												49	49	79	9			
34/ 33	.3	1.4	2.1	1.9	.4													56	56	62	37			
32/ 31		1.4	2.6	1.8														52	52	70	33			
30/ 29	.1	2.7	2.2	1.0	.1													55	55	79	42			
28/ 27	1.6	2.4	3.4	.2														69	69	80	70			
26/ 25	1.0	3.0	1.4	.1														50	50	72	83			
24/ 23	1.0	1.2	1.4															33	33	68	74			
22/ 21	.6	1.6	1.0															28	28	31	88			
20/ 19	.6	2.2	.2															27	27	39	70			
18/ 17		1.2																11	11	22	61			
16/ 15	.3	1.0	.1															13	13	16	72			
14/ 13	.7	1.6	.2															22	22	16	57			
12/ 11	.9	1.7	.1															24	24	26	35			
10/ 9	1.1	.7																16	16	20	36			
8/ 7	.3	.4																7	7	9	31			
6/ 5	.2	.3																5	5	5	16			
4/ 3	.7	.6																11	11	10	7			
2/ 1	.4	.9																12	12	14	6			
0/ -1	.7	.2																8	8	8	9			
-2/ -3	.3	.6																8	8	9	9			
-4/ -5	.3	.1																4	4	5	12			
-6/ -7	.3	.1																4	4	3	6			
Element (X)	ΣX^2		ΣX		\bar{X}		σ^2		No. Obs.		Mean No. of Hours with Temperature													
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total							
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

YEARS

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0000-0200
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

NOV

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0300-0500

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point	
58/ 57									.1									1	1		
56/ 55						.3	.4	.1	.2									10	10		
54/ 53						.2	.8	.7	.1									16	16		
52/ 51					.2	.4	.7	.6	.3									20	20		
50/ 49				.2	.7	.3	.2	.2	.1									16	16		
48/ 47			.1	.2	1.1	.3	.1	.2										19	19		
46/ 45				.8	1.7	1.4	.6	.2										42	42	3	
44/ 43			.9	1.7	1.4	1.1	.1											47	47	14	
42/ 41		.8	.4	1.1	1.2	1.6	.1											47	47	23	
40/ 39		.4	1.2	2.1	1.2	.9												53	53	64	
38/ 37		.1	1.6	2.8	1.0	.2												51	51	41	
36/ 35		.8	1.2	2.2	1.3													50	50	53	
34/ 33	.1	1.2	1.0	2.1	.8													47	47	76	
32/ 31	.2	1.4	1.7	1.7	.4													49	49	72	
30/ 29	.7	1.8	2.6	.6	.1													51	51	76	
28/ 27	1.0	3.1	3.0	.3														67	67	78	
26/ 25	1.3	2.7	1.8	.2														54	54	74	
24/ 23	.7	2.3	1.1															37	37	62	
22/ 21	.9	1.9	.4															29	29	50	
20/ 19	.9	1.8	.1															25	25	28	
18/ 17	.7	2.0	.1															25	25	30	
16/ 15	.3	1.1	.3															16	16	20	
14/ 13	.8	1.3																19	19	17	
12/ 11	1.0	.2	.2															13	13	20	
10/ 9	.8	1.0																16	16	11	
8/ 7	.2	.9	.1															11	11	14	
6/ 5	.4	.6																9	9	9	
4/ 3	.2	1.6																16	16	12	
2/ 1	.3	.6																8	9	14	
0/ -1	1.2	.7																17	17	14	
-2/ -3	.1	.2																3	3	9	
-4/ -5		.1																1	1	1	
-6/ -7	.2																	2	2	2	
-8/ -9	.3																	3	3	3	
Element (X)	ΣX ²		ΣX		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature										
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total				
Dry Bulb																					
Wet Bulb																					
Dew Point																					

PSYCHROMETRIC SUMMARY

YEARS

NOV

MONTH

0300-0500

HOURS (L, S, T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

NOV

STATION

STATION NAME

YEARS

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PAGE 1

0600-0800

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL			
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
58/ 57								.1		.3								4	4			
56/ 55							.3	.3	.3									9	9			
54/ 53						.2	.7	.6	.1									14	14			
52/ 51						.8	.1	.4	.1									13	13			
50/ 49					.6	1.0	.2	.4	.3									23	23			
48/ 47				.6	.4	.4	.3	.2										18	18			
46/ 45				1.0	1.3	1.0	.2											32	32	3		
44/ 43		.1	.4	1.6	1.7	2.0	.6											57	57	8		
42/ 41		.3	.3	2.0	1.1	1.3	.2											48	48	34		
40/ 39		.8	1.0	1.7	1.0	.7	.1											47	47	41		
38/ 37		.6	1.6	1.8	1.3	.2												49	49	48	7	
36/ 35		.7	1.3	1.9	1.0													44	44	63	14	
34/ 33	.2	1.0	1.3	2.0	.9													49	49	78	22	
32/ 31		.9	2.3	1.3	.1													42	42	61	39	
30/ 29	.6	3.6	3.2	1.3	.3													83	83	74	46	
28/ 27	1.2	2.8	3.1	.2														66	66	96	64	
26/ 25	.8	2.0	2.1															44	44	73	72	
24/ 23	.4	2.4	1.0															35	35	57	61	
22/ 21	.4	2.1	.1															24	24	44	76	
20/ 19	.9	2.9																34	34	40	72	
18/ 17	.7	1.3																18	18	28	82	
16/ 15	.7	.8	.3															16	16	17	85	
14/ 13	.7	.9																14	14	8	62	
12/ 11	.8	1.0																16	16	21	39	
10/ 9	1.0	.9	.1															18	18	16	29	
8/ 7	.1	1.0																10	10	9	24	
6/ 5	.1	.6	.1															7	7	11	8	
4/ 3	.7	1.0																15	15	10	8	
2/ 1	1.1	1.0																19	19	25	6	
0/ -1	1.2	.2																13	13	14	13	
-2/ -3	.2	.7																8	8	8	20	
-4/ -5																				2	6	
-6/ -7	.1																	1	1	1	15	
-8/ -9	.4																	4	4	4	7	
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature									
Rel. Hum.													≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total			
Dry Bulb																						
Wet Bulb																						
Dew Point																						

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2

0600-0800
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

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NDV
MONTH

PAGE 1 0900-1100
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
70/ 69													.1					1	1					
68/ 67													.1					1	1					
66/ 65											.2							2	2					
64/ 63										.1								1	1					
62/ 61								.1	.2	.7	.3							12	12					
60/ 59							.3	.3	.3	.1								10	10					
58/ 57							.4	.3	.3	.2								12	12					
56/ 55						.6	.8	.9	.4									24	24					
54/ 53					.1	.6	1.1	.9	.3	.1								28	28					
52/ 51				.1	.6	1.3	.7	1.1	.3									37	37					
50/ 49				.1	1.0	1.8	1.9	.1	.2									46	46					
48/ 47				.9	.4	1.6	1.2	.9										45	45	7				
46/ 45		.1	.2	.6	1.7	1.8	1.0	.1										49	49	19				
44/ 43		.1	.6	1.4	1.7	1.3	1.3											58	58	37				
42/ 41		.1	.9	1.7	1.2	1.3	.3											50	50	63	3			
40/ 39			.9	1.4	1.9	1.0												47	47	50	1			
38/ 37		.3	.8	1.3	1.9	.6												44	44	88	7			
36/ 35	.1	1.0	2.1	1.9	1.9	.1												64	64	63	16			
34/ 33	.2	1.8	1.8	1.6	.4													52	52	80	37			
32/ 31	.3	1.0	1.6	1.7	.2													43	43	102	46			
30/ 29	.8	1.9	1.8	.4	.1													45	45	80	58			
28/ 27	.9	1.6	1.0	.2														33	33	72	78			
26/ 25	1.0	.6	.3	.1														18	18	38	100			
24/ 23	.3	1.0	.4	.2														18	18	23	62			
22/ 21	.7	.9	.2															16	16	23	80			
20/ 19	.2	1.6	.1															17	17	13	56			
18/ 17	.7	1.6	.3															23	23	30	77			
16/ 15	.4	1.2																15	15	17	70			
14/ 13	.6	.3																8	8	11	41			
12/ 11	.4	.3	.1															8	8	7	48			
10/ 9	.2	.8																9	9	6	16			
8/ 7	.3	.3	.1															7	7	10	18			
6/ 5	.3	1.2																14	14	15	14			
4/ 3	.3	.9	.1															12	12	9	6			
Element (X)	Σ x ²		Σ x		Σ		Σ x		No. Obs.		Mean No. of Hours with Temperature										Total			
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F								
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

YEARS

0900-1100

HOURS (L, S, T.)

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

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NOV

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1200-1400

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL	TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point
74/ 73														.1				1	1		
72/ 71												.1	.1	.2				4	4		
70/ 69											.1	.1						2	2		
68/ 67													.2					2	2		
66/ 65											.4	.8						11	11		
64/ 63								.2	.1	.9	.3	.3						17	17		
62/ 61							.1	.6	1.1		.3							19	19		
60/ 59						.1	.1	.8	.6	.4	.1							19	19		
58/ 57							.8	1.0	1.2	.4								31	31		
56/ 55						.8	.8	2.2	.8	.4	.1							46	46		
54/ 53						1.1	1.2	1.1	.8									38	38		
52/ 51			.2		.6	1.0	2.7	.8	.1	.2								50	50	2	
50/ 49			.1	.1	.7	1.1	2.7	1.3	.4									58	58	5	
48/ 47				.4	.6	1.8	1.2	1.3										48	48	18	
46/ 45				.9	1.8	3.1	2.0	.4										74	74	50	2
44/ 43			.1	.7	1.0	2.6	1.8	.1										56	56	50	1
42/ 41			.2	.7	.7	2.0	.6											37	37	81	2
40/ 39			.6	.3	.8	1.6	.2											31	31	67	1
38/ 37		.9	.9	1.4	1.7	.8												51	51	78	2
36/ 35		1.2	1.7	1.7	.6	.7												52	52	87	22
34/ 33	.1	1.9	1.1	1.0	.8													44	44	96	40
32/ 31	.1	1.4	.7	1.0	.1													30	30	84	49
30/ 29	.2	1.6	.4	.4														24	24	69	51
28/ 27	1.0	.7	1.0	.2														26	26	47	83
26/ 25	.1	.8	.3															11	11	25	100
24/ 23	.3	.1	.4															8	8	23	73
22/ 21	.1	1.0	.1															11	11	11	78
20/ 19		1.3	.1															13	13	12	53
18/ 17	.3	.6																8	8	14	61
16/ 15		.9	.3															11	11	6	70
14/ 13	.3	.1	.1															5	5	10	50
12/ 11	.1	.7																7	7	5	36
10/ 9		.8																7	7	6	32
8/ 7	.4	.4																8	8	10	19
Element (X)	ΣX'		ΣX		X̄		s _x		No. Obs.		Mean No. of Hours with Temperature						Total				
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F					
Dry Bulb																					
Wet Bulb																					
Dew Point																					

FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

JUL 64

USAFETAC

PSYCHROMETRIC SUMMARY

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HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

FEARS

PAGE 1 1500-1700
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

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MONTH

PAGE 2 1500-1700
HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0-26-5 (OL A)

FORM 1-1

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

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1800-2000

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point												
62/ 61									.1									1	1													
60/ 59								.4	.1	.1								6	6													
58/ 57							.3	.3	.4									10	10													
56/ 55						.1	.2	.1	.4	.1								9	9													
54/ 53					.1	.8	.7	.7	.1									21	21													
52/ 51				.1		1.0	1.3	.2	.1									25	25													
50/ 49				.2	1.1	1.0	1.2	.6	.1									38	38													
48/ 47				.6	.9	1.2	.7	.3										33	33													
46/ 45			.1	.9	1.4	1.2	.6	.2										40	40	15												
44/ 43			.8	1.2	1.9	1.3	.2											49	49	17												
42/ 41		.1	.8	.9	1.2	1.2												38	38	39												
40/ 39		.2	.9	1.8	3.1	1.2	.1											66	66	63	3											
38/ 37		.4	1.4	3.2	1.6	.4												64	64	55	3											
36/ 35		1.1	2.7	2.0	1.3	.7												70	70	62	12											
34/ 33		1.8	1.0	2.3	.1	.1												48	48	86	35											
32/ 31	.2	1.6	.9	1.0	.6													38	38	99	49											
30/ 29	.3	2.7	1.1	1.6	.2													53	53	85	37											
28/ 27	.6	1.4	1.6	.8														39	39	58	86											
26/ 25	.4	2.3	1.9	.2														44	44	53	81											
24/ 23	.9	1.9	1.6	.1														40	40	56	62											
22/ 21	.1	1.6	1.2	.1														27	27	33	88											
20/ 19	.2	2.2	.6	.3														30	30	33	58											
18/ 17	.6	1.1																15	15	40	58											
16/ 15	.6	.7	.1	.1														13	13	17	69											
14/ 13	.3	.8																10	10	13	63											
12/ 11	.1	.7																7	7	5	51											
10/ 9	.3	.6																8	8	9	37											
8/ 7	.2	.2																4	4	7	24											
6/ 5	.6	.2																7	7	6	9											
4/ 3	.1	.9																9	9	10	10											
2/ 1	.6	.8																12	12	7	5											
0/ -1	1.0																	10	10	15	10											
-2/ -3	.2																	2	2	3	15											
-4/ -5	.3																	3	3	3	3											
Element (X)	Σ x ²					Σ x					Σ					Σ ²					N, Cbs.					Mean No. of Hours with Temperature						
Rel. Hum.																										≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total
Dry Bulb																																
Wet Bulb																																
Dew Point																																

USAFETAC FORM 64 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2 1800-2000
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

PAGE 1 2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point	
60/ 59								.1		.1								2	2			
58/ 57								.6	.3	.1								9	9			
56/ 55							.3	.4	.4									12	12			
54/ 53						.7	.2	.4	.4									16	16			
52/ 51				.2	.2	.7	.9	.7										24	24			
50/ 49				.1	.8	.9	.3	.2										21	21			
48/ 47					1.0	1.0	.3	.1										22	22			
46/ 45			.2	1.2	2.0	.6	1.1	.1										47	47	6		
44/ 43			1.0	1.6	2.7	.7	.2											53	53	20		
42/ 41			.6	1.2	1.1	.4	.1											31	31	28		
40/ 39		.2	.7	1.8	1.7	1.1												49	49	61	1	
38/ 37		.2	.7	1.6	.3													60	60	52	5	
36/ 35		1.1	1.4	1.9	1.3													52	52	65	10	
34/ 33	.2	1.1	2.6	2.0	.7	.1												60	60	58	25	
32/ 31	.3	1.8	2.2	1.7	.3													57	57	90	54	
30/ 29	.3	2.2	2.6	.9														54	54	88	41	
28/ 27	1.1	1.8	2.1	.2														47	47	71	67	
26/ 25	.2	2.6	1.7	.1														41	41	61	87	
24/ 23	.7	2.0	.8	.1														32	32	57	60	
22/ 21	.2	1.8	.3	.1														22	22	33	83	
20/ 19	.3	3.0	.8	.1														38	38	34	72	
18/ 17	.3	2.5	.2															27	27	28	70	
16/ 15	.3	1.3	.1															16	16	33	67	
14/ 13	.7	.8	.1															14	14	18	56	
12/ 11	.8	.8	.2															16	16	15	50	
10/ 9	1.1	.7																16	16	18	31	
8/ 7	.3																	3	3	7	36	
6/ 5	.6																	5	5	5	10	
4/ 3	.4	.8																11	11	4	9	
2/ 1	.1	1.0																10	10	15	4	
0/ -1	.4	.3																7	7	6	7	
-2/ -3	.7	.2																8	8	10	10	
-4/ -5	.2																	2	2	3	12	
-6/ -7	.3																	3	3	3	4	
Element (X)	Σ x ²		Σ x		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature											
Rel. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total					
Dry Bulb																						
Wet Bulb																						
Dew Point																						

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2

2100-2300
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

NOV
MONTH

PAGE 2

ALL

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B./W.B.	TOTAL				
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb		Wet Bulb		Dew Point				
6/ 5	.3	.5	.0															62	62	67	98					
4/ 3	.4	1.1	.0															105	105	82	68					
2/ 1	.4	1.0																95	96	115	53					
0/ -1	.8	.2																73	73	84	72					
-2/ -3	.2	.3																37	37	42	100					
-4/ -5	.2	.0																13	13	23	65					
-6/ -7	.2	.0																13	13	11	77					
-8/ -9	.1																	9	9	11	44					
-10/-11	.3																	20	20	20	38					
-12/-13	.1																	5	5	5	24					
-14/-15	.1																	6	6	6	17					
-16/-17	.0																	1	1	1	10					
-18/-19	.1																	4	4	4	11					
-20/-21	.0																	2	2	2	9					
-22/-23																						5				
-24/-25																						5				
-28/-29																						3				
-30/-31																						1				
TOTAL	623.9	15.1	14.4	11.9	10.4	6.8	4.1	2.2	.8	.4	.2	.1	.1	.0				7192	7193	7192	7192					
Element (X)	Σ X ²		Σ X		X		X		X		No. Obs.		Mean No. of Hours with Temperature										Total			
Rel. Hum.	27807386		422884		58.82		20.227		7192		≤ 0 F		≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F					720				
Dry Bulb	9802183		243393		33.81		14.758		7193		18.3		301.6	1.6	.2									720		
Wet Bulb	6693773		203799		28.31		11.303		7192		20.9		430.3													720
Dew Point	3393190		137330		19.11		10.354		7192		48.2		676.1													720

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 67-76 YEARS DEC
STATION STATION NAME MONTH
PAGE 1 0000-0200
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
54/ 53					.1			.2										3	3						
52/ 51					.2	.1												3	3						
50/ 49				.1	.3	.3	.1											8	8						
48/ 47				.1	.2	.3	.2											8	8						
46/ 45				1.0	1.9	.4	.9											39	39	1					
44/ 43			.1	1.3	1.7	1.1												39	39	4					
42/ 41			.5	1.6	2.0	.9												47	47	7					
40/ 39			1.0	1.3	1.1	.8	.2											40	40	18					
38/ 37			.8	1.5	1.1	.9												39	39	44					
36/ 35		.1	.6	1.8	.8	.2												33	33	60	7				
34/ 33	.1	.4	.4	2.8	.5	.1												41	41	46	10				
32/ 31	.2	.8	1.7	1.4	.6													44	44	40	18				
30/ 29	.1	.9	2.6	1.4	.2													48	48	55	33				
28/ 27	.4	1.0	3.0	.5														46	46	79	50				
26/ 25	.4	1.8	2.7	.3														49	49	50	44				
24/ 23	.1	2.3	2.8															48	48	66	37				
22/ 21	.4	4.2	1.1															53	53	60	58				
20/ 19	.2	3.9	.4															42	42	60	58				
18/ 17	.9	2.5																31	31	52	87				
16/ 15	.1	2.5																24	24	27	60				
14/ 13	1.1	1.3																22	22	31	74				
12/ 11	1.0	1.7																25	25	18	72				
10/ 9	1.2	2.0																30	31	37	65				
8/ 7	.9	.8																15	15	17	43				
6/ 5	.6	.5																11	11	15	31				
4/ 3	1.5	1.1																24	24	16	14				
2/ 1	.5	.6																11	11	15	20				
0/ -1	1.6	.2																17	18	20	16				
-2/ -3	1.7	.4																20	21	20	18				
-4/ -5	1.0	.1																10	10	12	10				
-6/ -7	.8																	7	7	7	8				
-8/ -9	.9																	8	8	8	21				
-10/-11	1.1																	10	10	10	10				
-12/-13	.4																	4	4	4	7				
Element (X)	Σ X ²			Σ X			Σ	Σ	No. Obs.			Mean No. of Hours with Temperature										Total			
Rel. Hum.												≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F				Total				
Dry Bulb																									
Wet Bulb																									
Dew Point																									

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

67-76

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 2

0000-0200

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.J.W.B.	Dry Bulb	Wet Bulb	Dew Point	
-14/-15	.6																	6	6	6	7	
-16/-17	.5																	5	5	5	12	
-18/-19	.2																	2	2	2	7	
-20/-21	.3																	3	3	3	6	
-22/-23	.3																	3	3	3	2	
-24/-25	.3																	3	3	3	3	
-26/-27	.1																	1	1	1	6	
-28/-29	.1																	1	1	1	2	
-30/-31																					1	
-32/-33	.1																	1	1	1	5	
-38/-39																					2	
-40/-41	.1																	1	1	1		
-42/-43	.2																	2	2	2		
-48/-49																					3	
TOTAL	20.3	29.1	17.8	15.2	10.9	5.1	1.4	.2										927	930	927	927	
Element (X)	ΣX^2	ΣX	\bar{X}	σ_x	No. Obs.	Mean No. of Hours with Temperature										Total						
Rel. Hum.	4195364	60648	65.4	15.675	927	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F					93						
Dry Bulb	759333	21565	23.2	16.706	930	10.6	63.0									93						
Wet Bulb	560149	18483	19.9	14.385	927	10.9	74.9									93						
Dew Point	315547	11539	12.4	13.625	927	14.6	91.3									93						

PSYCHROMETRIC SUMMARY

YEARS

DEC
MONTH

0300-0500
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

PAGE 2

0300-0500
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 67-76 DEC
STATION STATION NAME YEARS MONTH

PAGE 1 0600-0800
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9	10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point
54/ 53						.3	.2	.2										7	7		
52/ 51						.1	.1	.1										3	3		
50/ 49					.2	.1	.2											5	5		
48/ 47				.1	.3	.4	.4											12	12		
46/ 45				.9	1.1	.4	.6											28	28		
44/ 43				.8	1.3	.4	.8											30	30	3	
42/ 41			.2	1.2	1.5	.3	.2											32	32	10	
40/ 39		.3	1.6	1.7	2.6	.2	.1											61	61	16	
38/ 37		.1	.6	2.2	.8	.3												37	37	30	
36/ 35	.1		.9	1.9	1.3													39	39	44	3
34/ 33		.2	1.1	2.7	.8													44	44	62	13
32/ 31		1.3	1.8	1.0		.1												39	39	61	14
30/ 29		.9	2.9	1.2	.2													48	48	53	33
28/ 27	.3	3.0	2.4	.2														55	55	76	42
26/ 25	.2	1.5	1.9															34	34	61	49
24/ 23	.6	3.2	1.4	.1														50	50	54	40
22/ 21	.5	2.4	1.4															40	40	52	89
20/ 19	.3	3.9	.4															43	43	49	59
18/ 17	.5	3.2	.5															40	40	45	59
16/ 15	.4	1.9	.2															24	24	41	70
14/ 13	1.3	1.7																28	28	36	64
12/ 11	.6	.4	.1															11	12	13	81
10/ 9	1.9	2.5																41	41	35	47
8/ 7	1.3	1.1																22	22	28	41
6/ 5	.6	.4																10	10	11	22
4/ 3	1.2	.6																17	17	18	25
2/ 1	.4	1.4																17	18	10	15
0/ -1	1.6	.2																17	17	24	23
-2/ -3	1.2	.4																15	15	16	12
-4/ -5	1.1																	10	10	11	7
-6/ -7	1.7																	16	16	16	17
-8/ -9	1.5	.1																15	15	15	13
-10/-11	.4																	4	4	4	13
-12/-13	.2																	3	3	3	13
Element (X)	Σ X ²			Σ X			Σ			Σ			Σ			Σ			No. Obs.		
Rel. Hum.																			Mean No. of Hours with Temperature		
Dry Bulb																			≤ 0 F	≤ 32 F	≥ 67 F
Wet Bulb																			≥ 73 F	≥ 80 F	≥ 93 F
Dew Point																			Total		

PSYCHROMETRIC SUMMARY

YEARS

0600-0800
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

DEC
MONTH

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 2

0900-1100

HOURS (L. S. T.)

[illegible]

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (OL A)

USAFETAC

DATA PROCESSING BRANCH
 ETAC
 WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

12 MARMSTRON AFB MT/GREAT FALLS

67-76

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1200-1400

HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
64/ 63												.1						1	1						
62/ 61										.1	.1							2	2						
60/ 59									.2		.1							3							
58/ 57							.3	.4	.1	.2	.2							12							
56/ 55							.5	.8	.3	.4								19	14						
54/ 53							.6	.6	.3									15	15						
52/ 51					.4	.8	.5	.8	.3									26	26						
50/ 49					.8	1.5	1.1	.8	.4									42	42						
48/ 47				.2	.6	1.4	1.5	.5										39	39	2					
46/ 45			.2	.6	1.2	1.8	.6	.3										45	45	2					
44/ 43		.1	.1	.8	1.4	2.8	.6	.2										56	56	20					
42/ 41			.4	1.3	2.0	2.0												54	54	41					
40/ 39		.2	.1	1.4	2.6	2.0												59	59	43	1				
38/ 37			.5	1.5	2.7	.8												51	51	58	4				
36/ 35	.2		.3	3.1	1.9	.1												53	53	82	12				
34/ 33	.1	.3	1.3	1.8	1.4													46	46	72	5				
32/ 31		.9	1.1	1.1	.4													32	32	85	21				
30/ 29	.2	1.2	1.5	.5														32	32	8	41				
28/ 27	.4	1.9	1.5	.4														40	40	6	54				
26/ 25	.6	1.1	1.9															34	34	50	47				
24/ 23	.2	.8	1.2															20	20	38	63				
22/ 21	.5	1.2	.6															22	22	35	89				
20/ 19	.2	1.6																17	18	22	101				
18/ 17		1.3	.1															13	13	18	63				
16/ 15	.5	.8	.1															13	13	15	67				
14/ 13	.5	1.6																20	20	18	61				
12/ 11	.2	1.5																16	16	17	61				
10/ 9	.4	1.8																21	21	19	46				
8/ 7	.8	1.0																16	16	20	29				
6/ 5	.9	.8																15	15	16	14				
4/ 3	.2	.8																9	9	10	19				
2/ 1	.1	1.0																10	10	8	17				
0/ -1	1.4																	13	13	20	14				
-2/ -3	.1	.3																13	13	12	4				
Element (X)	Σ X ²		Σ X		X̄		σ _x		No. Obs.		Mean No. of Hours with Temperature														
Ref. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total								
Dry Bulb																									
Wet Bulb																									
Dew Point																									

FORM 34 JUL 54 G-26 5 (OL A) REVISI RE-101.5 EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

1200-1400
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTRUM AFB MT/GREAT FALLS

67-76

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1500-1700
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																					TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point				
60/ 59										.1	.1	.1						3	3						
58/ 57								.3	.1									4	4						
56/ 55						.1	.3	.4		.2								10	10						
54/ 53						.1	.2	.6	.2	.1								12	12						
52/ 51				.1	.2	.6	.3	.9	.2									22	22						
50/ 49				.1	.2	.8	.5	.4	.2									22	22						
48/ 47				.2	.9	1.1	1.3	.6										38	38						
46/ 45			.1	.5	1.7	1.3	1.4	.3										50	50	5					
44/ 43			.1	1.1	1.2	2.4	.3	.2										49	49	9					
42/ 41			.6	1.2	2.6	1.4	.4											58	58	26					
40/ 39			.4	1.7	2.9	1.0	.2											58	58	35					
38/ 37	.1		.3	1.0	2.5	1.4												49	49	59	3				
36/ 35	.1	.1	.4	3.2	1.4	.4												53	53	60	9				
34/ 33		.1	1.2	2.9	1.2													50	50	95	5				
32/ 31	.2	.2	1.9	2.0	.9													49	49	58	26				
30/ 29	.1	1.2	1.1	1.2	.2													35	35	88	29				
28/ 27	.3	1.4	2.3	.5														42	42	88	45				
26/ 25	.3	1.4	1.9	.1														35	35	51	48				
24/ 23	.3	1.0	1.2															23	23	50	50				
22/ 21	.8	1.5	.8															23	28	42	89				
20/ 19	.4	1.6	.6															25	27	25	98				
18/ 17	.6	1.1																16	16	26	76				
16/ 15	.5	1.3	.2															19	19	21	79				
14/ 13	.4	.8	.1															12	12	15	54				
12/ 11	.4	1.9																22	22	22	65				
10/ 9	.5	1.1																15	15	18	44				
8/ 7	.8	.8																14	14	15	39				
6/ 5	.5	.9																13	13	11	16				
4/ 3	.3	.8																10	10	14	22				
2/ 1	.4	1.0																13	13	12	15				
0/ -1	.8	.4																11	11	11	7				
-2/ -3	1.4	.6																19	19	22	15				
-4/ -5	.5																	5	5	6	14				
-6/ -7	1.2																	11	11	11	10				
Element (X)	ΣX^2		ΣX		\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature														
Rel Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total								
Dry Bulb																									
Wet Bulb																									
Dew Point																									

PSYCHROMETRIC SUMMARY

1500-1700
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MARMSTROM AFB MT/GREAT FALLS 67-76 DEC
STATION STATION NAME YEARS MONTH

PAGE 1 1800-2000
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
52/ 51					.3	.1	.2	.3										9	9					
50/ 49				.1	.1	.5	.5	.2										14	14					
48/ 47				.2	1.2	1.0	.8											29	29					
46/ 45				.4	1.0	1.1	.2	.2										27	27					
44/ 43			.2	1.6	.9	1.0	.3											37	37	6				
42/ 41			.6	.9	1.8	.8	.2											40	40	5				
40/ 39			1.0	1.8	1.3	.5	.3											46	46	29				
38/ 37			1.0	2.1	1.5	.2												44	44	49	2			
36/ 35		.1	.8	2.5	1.1	.3												44	44	49	4			
34/ 33		.4	1.7	2.2	.9	.2												50	50	52	12			
32/ 31	.1		2.7	1.5	.8													47	47	52	18			
30/ 29		.8	2.9	2.6	.2													60	60	69	34			
28/ 27	.2	1.3	4.1	.9	.1													61	61	70	37			
26/ 25	.4	2.1	3.3															54	54	76	40			
24/ 23	.2	1.7	1.4															31	31	81	58			
22/ 21	1.1	2.6	1.6															49	49	66	75			
20/ 19	.8	1.8	.2															26	26	40	72			
18/ 17	.8	2.2	.4															31	32	40	93			
16/ 15	.6	2.2	.1															27	27	29	77			
14/ 13	.2	.5	.1															8	8	17	58			
12/ 11	.3	1.6																18	18	12	67			
10/ 9	.6	1.4																19	19	22	42			
8/ 7	1.4	.4																17	17	22	41			
6/ 5	.8	1.1																17	17	11	26			
4/ 3	.8	.8																14	14	20	22			
2/ 1	.5	1.0																14	14	11	16			
0/ -1	.8	.4																11	11	13	19			
-2/ -3	1.7																	21	22	20	5			
-4/ -5	.6																	6	7	10	11			
-6/ -7	1.1																	10	10	10	8			
-8/ -9	1.1	.1																11	11	11	24			
-10/-11	.9																	8	8	8	11			
-12/-13	.3																	3	3	3	4			
-14/-15	.6																	6	6	6	10			
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ			
Rel. Hum.																								
Dry Bulb																								
Wet Bulb																								
Dew Point																								
Mean No. of Hours with Temperature																								
		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total										

2

1

YEARS

MONTH

HOURS (L. S. T.)

0-26-5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

67-76
YEARS

DEC
MONTH

PAGE 1 2100-2300
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																		TOTAL	TOTAL				
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
54/ 53								.1										1	1					
52/ 51					.3		.1											4	4					
50/ 49					.3	.1	.2											6	6					
48/ 47				.1	.8	.9	.3											19	19					
46/ 45				.7	1.6	1.2	.3	.1										36	36					
44/ 43			.2	2.0	2.2	1.0	.1											50	50	5				
42/ 41			.1	1.4	1.5	.2	.2											32	32	3				
40/ 39		.1	.8	1.8	.7	.7	.2											39	39	24				
38/ 37		.3	.5	1.5	1.2	.2												35	35	53				
36/ 35		.1	.8	2.7	.4	.2												39	39	52	6			
34/ 33		.4	1.0	2.0	1.0													40	40	47	4			
32/ 31		.2	2.0	.9	.5													33	33	43	22			
30/ 29		.7	2.7	2.0	.8													56	56	51	28			
28/ 27	.3	1.2	4.2	1.0														62	62	63	45			
26/ 25	.3	1.6	3.3	.2														50	50	59	49			
24/ 23	.1	3.5	2.1															52	52	74	54			
22/ 21	.5	3.8	.8															47	47	79	48			
20/ 19	.2	3.4	.3															36	38	52	68			
18/ 17	1.1	3.0	.1															39	39	50	82			
16/ 15	1.1	2.4	.3															35	36	44	69			
14/ 13	.1	1.3																13	13	17	83			
12/ 11	.3	1.2																14	14	15	72			
10/ 9	.7	1.2																17	18	18	47			
8/ 7	1.4	.8																20	20	22	43			
6/ 5	.5	1.0																14	14	10	20			
4/ 3	.8	2.0																25	25	18	23			
2/ 1	.4	.7																10	12	22	16			
0/ -1	1.1																	10	10	13	15			
-2/ -3	1.5	1.0																23	23	22	16			
-4/ -5	1.1	.2																12	13	12	9			
-6/ -7	1.1																	10	10	11	14			
-8/ -9	1.2																	11	11	11	14			
-10/-11	.5																	5	5	5	13			
-12/-13	.4																	4	4	4	12			
Element (X)	ΣX^2		ΣX			\bar{X}		σ_x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.												≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

PAGE 2

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS

67-76

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 1

ALL

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																											TOTAL D.B./W.B.	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	Dry Bulb	Wet Bulb	Dew Point											
64/ 63													.0					1	1												
62/ 61												.0	.0					2	2												
60/ 59										.0	.0	.0	.0					6	6												
58/ 57								.0	.1	.0	.0	.0						17	17												
56/ 55						.0	.2	.2	.0	.1								38	38												
54/ 53					.0	.1	.2	.3	.1	.0								53	53												
52/ 51				.0	.2	.3	.2	.3	.1									84	84												
50/ 49				.1	.3	.5	.4	.3	.1									118	118												
48/ 47				.1	.6	.7	.6	.2										172	172	2											
46/ 45			.1	.7	1.3	1.0	.8	.1										295	295	14											
44/ 43		.0	.1	1.3	1.3	1.4	.4	.1										340	340	58											
42/ 41		.0	.4	1.4	1.9	.9	.2											358	358	124											
40/ 39		.1	.8	1.5	1.8	.8	.1											385	385	206	1										
38/ 37	.0	.1	.6	1.7	1.5	.5	.0											336	336	368	11										
36/ 35	.1	.1	.7	2.6	1.2	.2												353	353	447	58										
34/ 33	.0	.3	1.1	2.4	.9	.0												353	353	503	64										
32/ 31	.1	.7	1.8	1.5	.5	.0												343	343	453	151										
30/ 29	.1	1.0	2.3	1.3	.2													365	365	540	277										
28/ 27	.3	1.7	2.8	.6	.0													405	405	580	363										
26/ 25	.4	1.7	2.4	.2														351	351	472	355										
24/ 23	.4	2.2	1.7	.0														321	321	481	403										
22/ 21	.6	2.6	1.1															316	316	450	608										
20/ 19	.3	2.8	.4															265	270	339	604										
18/ 17	.6	2.0	.2															208	210	307	598										
16/ 15	.5	1.9	.2															193	195	228	569										
14/ 13	.6	1.3	.0															150	150	196	512										
12/ 11	.5	1.3	.0															141	144	134	554										
10/ 9	1.0	1.7																205	207	206	384										
8/ 7	1.0	.9																145	145	174	323										
6/ 5	.7	.7																100	101	99	179										
4/ 3	.7	1.1																132	132	115	171										
2/ 1	.4	.8																92	95	108	129										
0/ -1	1.2	.2																109	112	133	116										
-2/ -3	1.4	.6																145	147	149	98										
Element (X)	Σ x ²		Σ x		Σ		Σ x		No. Obs.		Mean No. of Hours with Temperature							Total													
Ref. Hum.											≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F															
Dry Bulb																															
Wet Bulb																															
Dew Point																															

PSYCHROMETRIC SUMMARY

YEARS

ALL

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

ALL

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL D.B./W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point															
106/105																		.0	1	1															
104/103																		.0	6	6															
102/101																		.0	5	5															
100/ 99																		.0	13	13															
98/ 97																		.0	20	20															
96/ 95																	.0	.1	52	52															
94/ 93													.0	.0	.0	.0	.1	139	139																
92/ 91													.0	.0	.0	.0	.2	225	225																
90/ 89									.0	.0	.0	.0	.0	.0	.1	.1	.1	.1	300	300															
88/ 87								.0	.0	.0	.0	.0	.1	.1	.1	.1	.1	.1	414	414															
86/ 85								.0	.0	.0	.1	.1	.1	.1	.1	.1	.1	.1	475	475															
84/ 83							.0	.0	.0	.1	.1	.1	.2	.1	.1	.1	.0	.0	632	632															
82/ 81				.0	.0	.0	.0	.0	.0	.1	.2	.2	.2	.1	.1	.0	.0	.0	873	873															
80/ 79			.0	.0	.0	.0	.0	.1	.1	.2	.2	.2	.2	.1	.0	.0	.0	.0	991	991															
78/ 77			.0	.0	.0	.0	.0	.1	.2	.2	.2	.2	.1	.1	.0				1005	1005															
76/ 75		.0	.0	.0	.0	.0	.1	.2	.3	.2	.3	.2	.1	.0	.0				1175	1175															
74/ 73		.0	.0	.0	.0	.0	.1	.3	.3	.3	.2	.1	.0	.0					1292	1294	5														
72/ 71		.0	.0	.0	.0	.1	.2	.3	.3	.3	.2	.1	.0						1446	1447	14	1													
70/ 69	.0	.0	.0	.0	.1	.2	.3	.3	.4	.3	.2	.1	.0						1739	1741	29	6													
68/ 67	.0	.0	.0	.1	.2	.3	.3	.4	.3	.2	.1	.0	.0						1718	1719	52	13													
66/ 65	.0	.0	.1	.2	.4	.4	.4	.4	.4	.2	.1	.0							1988	1989	225	15													
64/ 63	.0	.1	.1	.2	.4	.5	.5	.5	.4	.1	.0	.0							2519	2520	499	25													
62/ 61	.0	.1	.2	.3	.4	.5	.5	.4	.2	.1	.0								2380	2380	1038	58													
60/ 59	.0	.1	.3	.5	.5	.5	.4	.4	.1	.0	.0								2507	2509	1821	122													
58/ 57	.1	.2	.4	.5	.6	.5	.5	.3	.1	.0									2818	2818	2477	214													
56/ 55	.1	.4	.5	.5	.7	.6	.5	.3	.1	.0									3236	3237	3111	396													
54/ 53	.2	.5	.5	.6	.8	.7	.4	.2	.0	.0									3252	3252	3691	723													
52/ 51	.0	.2	.5	.5	.6	.7	.6	.4	.1	.0									3205	3205	4029	1063													
50/ 49	.0	.2	.6	.5	.7	.7	.5	.3	.1	.0																									

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

24112 MALMSTROM AFB MT/GREAT FALLS 67-77

STATION

STATION NAME

YEARS

ALL
MONTH

PAGE 2

ALL
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B./W.B.	Dry Bulb	Wet Bulb	Dew Point			
38/ 37	.1	.5	1.0	1.2	.7	.2	.0											3180	3180	4510	3691			
36/ 35	.1	.7	1.0	1.2	.5	.1	.0											3151	3151	4693	4230			
34/ 33	.1	.8	1.1	1.1	.3	.0	.0											3049	3049	4656	4166			
32/ 31	.1	.8	1.1	.8	.2	.0												2568	2568	4559	4369			
30/ 29	.2	.9	1.1	.5	.1													2405	2405	4074	5044			
28/ 27	.2	1.0	1.1	.3	.0													2345	2345	3528	6088			
26/ 25	.3	1.0	.8	.1														1856	1856	2815	5066			
24/ 23	.3	1.0	.5	.0														1545	1545	2557	3984			
22/ 21	.2	1.0	.3	.0														1326	1326	1929	4584			
20/ 19	.2	1.0	.2	.0	.0													1226	1231	1478	4182			
18/ 17	.2	.7	.1															935	940	1267	3735			
16/ 15	.2	.6	.1	.0														826	830	1004	3265			
14/ 13	.3	.5	.0															719	728	831	2515			
12/ 11	.3	.5	.0															720	725	730	2203			
10/ 9	.3	.6	.0															767	780	750	2008			
8/ 7	.3	.4	.0															599	613	683	1268			
6/ 5	.2	.4	.0															497	505	535	805			
4/ 3	.2	.5	.0															581	593	521	712			
2/ 1	.2	.5																591	608	621	534			
0/ -1	.5	.1																516	528	666	488			
-2/ -3	.3	.2																419	424	449	550			
-4/ -5	.3	.1																351	355	370	466			
-6/ -7	.3	.1																364	365	375	452			
-8/ -9	.4	.0																392	392	419	512			
-10/-11	.4	.0																320	321	316	394			
-12/-13	.3	.0																234	234	241	350			
-14/-15	.2																	203	203	203	343			
-16/-17	.1																	103	103	103	287			
-18/-19	.1																	98	98	98	292			
-20/-21	.2																	146	146	146	249			
-22/-23	.1																	82	82	82	219			
-24/-25	.1																	77	77	77	170			
-26/-27	.1																	49	49	49	170			
-28/-29	.0																	34	35	34	125			
Element (X)	ΣX^2		ΣX		\bar{X}	σ_x	No. Obs.		Mean No. of Hours with Temperature															
Rel. Hum.									≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total									
Dry Bulb																								
Wet Bulb																								
Dew Point																								

PSYCHROMETRIC SUMMARY

67-77

ALL

MONTH

PAGE 3

ALL

HOURS (L, S, T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

DRY-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

24112 MALMSTRDM AFB MT/GREAT FALLS 67-77

STATION	STATION NAME	YEARS												
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
00-02	MEAN	16.8	23.9	27.8	35.7	44.7	53.1	58.4	58.1	48.4	39.9	30.7	23.2	38.4
	S D	20.880	14.062	12.471	9.363	7.390	7.532	6.835	6.725	8.675	10.654	13.912	16.706	18.222
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	900	930	10959
03-05	MEAN	16.1	23.2	26.7	33.8	42.5	50.8	55.3	55.0	46.2	38.5	30.0	22.6	36.8
	S D	21.054	14.406	12.437	8.897	6.881	7.146	6.827	6.319	8.602	10.607	14.050	17.009	17.599
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	900	930	10959
06-08	MEAN	15.9	22.9	27.0	36.4	47.3	56.4	61.1	58.8	48.0	39.0	29.8	22.5	38.8
	S D	21.136	14.505	12.828	9.841	7.986	7.717	7.020	7.529	9.308	11.135	13.930	17.007	19.331
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	900	930	10959
09-11	MEAN	18.2	27.8	34.5	45.1	55.6	64.4	71.3	70.2	58.8	48.1	35.7	26.1	46.4
	S D	21.562	15.939	14.535	11.891	9.519	9.348	8.127	9.550	11.001	12.934	14.665	17.281	21.963
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	900	930	10959
12-14	MEAN	22.0	33.3	39.6	49.9	60.3	69.4	77.6	76.7	65.3	54.1	40.7	30.6	51.7
	S D	21.788	16.557	14.602	13.127	10.661	10.737	8.605	10.653	12.126	13.422	14.965	17.596	22.794
	TOTAL OBS	930	849	930	900	929	900	930	930	900	920	900	930	10958
15-17	MEAN	21.5	33.8	40.4	51.1	61.3	70.4	79.6	78.4	66.7	53.8	39.2	29.2	52.2
	S D	21.496	15.937	14.300	13.458	11.001	10.905	9.090	10.934	12.281	13.329	14.584	17.045	23.426
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	899	930	10958
18-20	MEAN	18.2	27.7	34.5	46.0	57.2	65.8	74.8	72.5	58.8	45.6	33.2	25.0	46.7
	S D	20.770	14.232	12.983	11.942	9.948	9.698	8.796	10.348	11.035	11.324	13.695	16.449	22.544
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	897	929	10955
21-23	MEAN	17.6	24.9	29.9	39.1	48.9	57.3	64.1	62.7	51.5	41.3	31.5	23.7	41.1
	S D	20.919	13.986	12.170	9.941	7.923	7.890	7.304	7.602	9.395	10.621	13.900	16.333	19.503
	TOTAL OBS	930	849	930	900	930	900	930	930	900	930	897	929	10955
ALL HOURS	MEAN	13.3	27.2	32.5	42.1	52.2	61.0	67.8	66.6	55.5	45.0	33.8	25.4	44.0
	S D	21.306	15.516	14.283	12.828	11.305	11.383	11.708	12.265	12.835	13.247	14.758	17.168	21.542
	TOTAL OBS	7440	6792	7440	7200	7439	7200	7440	7440	7200	7440	7193	7438	87662

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

WET-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

24112 MALMSTROM AFB MT/GREAT FALLS

67-77

STATION	STATION NAME	YEARS												
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
00-02	MEAN S D TOTAL OBS	14.1 18.680 930	21.0 11.940 838	24.4 10.376 930	31.1 7.252 900	39.4 5.850 929	46.7 5.625 900	49.9 5.391 930	49.4 4.870 930	41.9 6.310 900	34.4 7.689 930	26.4 11.236 900	19.9 14.385 927	33.3 15.460 10944
03-05	MEAN S D TOTAL OBS	13.5 18.921 925	20.5 12.324 835	23.5 10.519 930	29.9 7.090 900	38.0 5.700 930	45.3 5.574 900	48.4 5.448 930	47.8 4.922 930	40.7 6.467 900	33.5 7.701 930	25.9 11.448 899	19.5 14.756 925	32.5 15.261 10934
06-08	MEAN S D TOTAL OBS	13.3 18.989 929	20.3 12.414 832	23.8 10.840 930	31.8 7.534 900	41.3 5.760 930	48.9 5.381 900	51.9 5.074 929	50.2 4.875 930	41.9 6.630 900	33.8 7.923 930	25.7 11.278 900	19.4 14.718 928	33.6 16.282 10938
09-11	MEAN S D TOTAL OBS	15.1 18.979 930	23.6 12.834 840	28.5 10.998 930	36.6 7.664 900	45.2 5.736 930	52.1 5.632 900	55.9 4.970 930	55.0 4.367 930	47.4 6.397 900	39.1 7.814 929	29.7 11.060 900	22.0 14.513 928	37.6 16.712 10947
12-14	MEAN S D TOTAL OBS	17.8 18.481 930	26.9 12.439 848	31.4 10.033 929	38.7 7.607 899	46.9 5.643 929	53.5 5.668 900	57.4 4.849 930	56.6 4.086 930	49.6 6.413 898	41.7 7.491 930	32.6 10.645 900	25.1 14.049 929	39.9 16.054 10952
15-17	MEAN S D TOTAL OBS	17.5 18.325 930	27.3 11.917 846	31.8 9.657 929	39.1 7.519 900	47.2 5.486 930	53.7 5.573 900	57.5 4.807 930	56.7 3.996 928	49.8 6.325 900	41.6 7.529 930	31.6 10.644 899	24.1 13.831 928	39.9 16.127 10950
18-20	MEAN S D TOTAL OBS	15.2 18.404 928	23.8 11.653 839	28.6 9.691 930	36.8 7.425 900	45.8 5.597 930	52.7 5.614 900	56.4 4.944 930	55.0 4.170 927	46.8 6.494 900	37.6 7.393 930	28.1 10.811 897	21.3 13.969 926	37.4 16.594 10937
21-23	MEAN S D TOTAL OBS	14.8 18.512 928	22.0 11.817 836	25.9 9.804 930	33.3 7.222 899	42.0 5.531 930	49.2 5.515 900	52.6 5.102 930	51.4 4.570 927	43.5 6.447 900	35.2 7.477 930	26.9 11.100 897	20.4 14.025 922	34.8 15.821 10929
ALL HOURS	MEAN S D TOTAL OBS	15.2 18.721 7430	23.2 12.440 6714	27.2 10.710 7438	34.7 8.131 7198	43.2 6.554 7438	50.3 6.316 7200	53.7 6.045 7439	52.8 5.550 7432	45.2 7.279 7198	37.1 8.263 7439	28.3 11.303 7192	21.5 14.418 7413	36.1 16.289 87531

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

DEW-POINT TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

24112 MALMSTROM AFB MT/GREAT FALLS 67-77

STATION	STATION NAME	YEARS												
HRS II S T I		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
00-02	MEAN	6.3	13.8	17.5	23.9	32.9	40.5	42.3	41.2	34.7	26.7	18.5	12.4	26.0
	S D	18.891	11.830	9.761	7.528	7.319	6.635	7.482	7.691	6.919	7.177	10.549	13.625	15.673
	TOTAL OBS	930	838	930	900	929	900	930	930	900	930	900	927	10944
03-05	MEAN	5.9	13.2	16.9	23.3	32.2	39.8	41.9	40.8	34.2	26.3	18.2	12.1	25.5
	S D	19.008	12.104	10.262	7.338	7.114	6.510	6.975	7.310	6.918	7.040	10.921	14.190	15.718
	TOTAL OBS	925	835	930	900	930	900	930	930	900	930	899	925	10934
06-08	MEAN	5.6	13.0	17.1	24.6	34.2	42.0	44.1	42.5	35.1	26.5	17.9	12.0	26.3
	S D	19.207	12.308	10.539	7.529	6.806	6.476	6.797	6.971	6.878	7.051	10.774	14.208	16.388
	TOTAL OBS	929	832	930	900	930	900	929	930	900	930	900	928	10938
09-11	MEAN	6.8	14.7	18.6	25.3	34.3	41.8	44.1	43.2	36.7	28.3	20.0	13.5	27.3
	S D	18.744	11.855	9.801	7.363	7.177	7.277	7.536	6.753	6.657	6.571	10.155	13.625	15.854
	TOTAL OBS	930	840	930	900	930	900	930	930	900	929	900	928	10947
12-14	MEAN	8.2	15.8	18.7	24.5	33.3	40.7	42.8	41.6	35.4	27.8	20.4	15.0	27.1
	S D	17.735	10.724	8.724	7.371	7.523	7.721	8.155	7.239	7.121	6.709	9.647	12.573	14.878
	TOTAL OBS	930	848	929	899	929	900	930	930	898	930	900	929	10952
15-17	MEAN	7.9	16.2	18.5	24.0	33.2	40.3	41.6	40.7	34.5	27.5	20.0	14.4	26.6
	S D	17.806	10.382	8.400	7.482	8.032	7.918	8.590	7.580	7.522	6.925	9.781	12.552	14.766
	TOTAL OBS	930	846	929	900	930	900	930	928	900	930	899	928	10950
18-20	MEAN	6.9	15.5	18.5	24.5	33.9	41.7	42.5	41.1	34.9	27.3	19.1	13.3	26.7
	S D	18.325	11.110	8.649	7.919	8.362	8.347	8.910	7.973	7.422	6.944	10.321	13.157	15.539
	TOTAL OBS	928	839	930	900	930	900	930	927	900	930	897	926	10937
21-23	MEAN	6.7	14.8	18.1	24.6	33.9	41.5	42.8	41.3	34.9	26.9	18.7	12.7	26.5
	S D	18.555	11.649	9.145	7.793	7.708	7.322	8.003	8.133	7.259	7.076	10.370	13.276	15.673
	TOTAL OBS	928	836	930	899	930	900	930	927	900	930	897	922	10929
ALL HOURS	MEAN	6.8	14.6	18.0	24.3	33.5	41.0	42.8	41.5	35.0	27.2	19.1	13.2	26.5
	S D	18.551	11.556	9.461	7.560	7.545	7.340	7.882	7.510	7.123	6.968	10.354	13.445	15.578
	TOTAL OBS	7430	6714	7438	7198	7438	7200	7439	7432	7198	7439	7192	7413	87531

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
PERIOD

JAN
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L S T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	00-02	100.0	100.0	99.5	95.9	87.4	62.3	30.4	12.2	4.2	64.7	930
	03-05	100.0	99.9	99.4	96.2	87.5	67.6	31.0	12.4	3.9	65.2	925
	06-08	99.9	99.9	99.5	97.0	88.5	64.5	30.9	12.1	3.3	65.1	929
	09-11	100.0	100.0	98.4	93.7	80.4	60.3	26.1	9.8	3.2	62.7	930
	12-14	100.0	99.4	94.9	84.3	69.8	46.3	21.4	5.7	.8	57.8	930
	15-17	100.0	99.4	95.4	85.4	72.3	46.2	20.2	5.2	1.1	58.0	930
	18-20	100.0	100.0	99.2	94.1	82.5	59.8	25.3	8.2	1.3	62.6	928
	21-23	100.0	100.0	99.1	95.2	84.7	59.4	26.7	9.5	2.3	63.6	928
TOTALS		100.0	99.8	98.2	92.7	81.6	58.3	26.5	9.4	2.5	62.5	7430

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
PERIOD

FEB
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
FEB	00-02	100.0	99.6	99.0	95.1	85.6	63.4	38.4	20.0	7.5	66.5	838
	03-05	100.0	99.6	98.7	95.4	86.9	64.4	39.4	18.1	6.8	66.5	835
	06-08	100.0	99.6	98.2	95.8	86.5	65.6	39.7	17.1	5.9	66.6	832
	09-11	100.0	99.4	95.4	84.4	67.0	50.1	31.5	16.1	6.0	60.6	840
	12-14	100.0	97.4	86.2	66.6	52.4	35.4	22.4	10.7	2.2	52.9	848
	15-17	100.0	97.8	86.2	67.3	51.8	35.3	22.1	8.7	1.2	52.6	846
	18-20	100.0	99.8	97.0	89.4	74.5	53.4	30.0	15.7	4.6	61.9	839
	21-23	100.0	100.0	99.3	94.3	86.1	65.7	37.9	20.2	7.1	66.4	836
TOTALS		100.0	99.2	95.1	86.0	73.9	54.2	32.7	15.8	5.2	61.8	6714

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

MAR

STATION

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAR	00-02	100.0	100.0	99.5	95.8	82.3	62.7	41.7	23.5	9.6	67.1	930
	03-05	100.0	100.0	99.1	95.7	85.9	66.9	45.4	26.6	11.6	68.5	930
	06-08	100.0	100.0	99.1	95.6	85.7	66.7	44.2	25.7	11.2	68.2	930
	09-11	100.0	99.5	92.7	71.6	54.0	39.0	27.6	16.9	5.3	56.1	930
	12-14	100.0	97.0	72.8	49.7	38.2	29.6	20.3	10.3	2.7	47.7	929
	15-17	100.0	96.1	68.0	48.0	36.3	26.3	17.3	9.3	1.7	45.9	929
	18-20	100.0	99.8	92.0	72.2	54.0	39.9	26.6	14.0	4.0	55.7	930
	21-23	100.0	100.0	99.0	91.7	73.7	54.2	35.9	20.0	7.7	63.8	930
TOTALS		100.0	99.1	90.3	77.5	63.8	48.2	32.4	18.3	6.7	59.1	7438

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
PERIOD

APR
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
APR	00-02	100.0	100.0	99.1	92.3	75.1	53.1	37.1	23.6	10.8	64.6	900
	03-05	100.0	100.0	99.8	94.4	82.2	61.2	43.8	27.3	11.3	67.4	900
	06-08	100.0	100.0	99.1	89.8	73.1	57.0	40.2	24.6	10.1	64.9	900
	09-11	100.0	97.8	81.6	56.9	40.9	31.0	20.8	13.4	4.2	50.2	900
	12-14	100.0	89.8	60.1	39.6	28.7	23.4	15.8	8.8	2.7	42.2	899
	15-17	100.0	83.8	51.3	36.7	28.9	21.0	13.8	8.2	2.9	40.2	900
	18-20	100.0	94.4	73.2	51.4	38.1	29.1	20.1	11.4	3.9	47.8	900
	21-23	100.0	99.9	96.0	79.9	58.8	43.7	30.9	20.5	7.7	59.2	899
TOTALS		100.0	95.7	82.5	67.6	53.2	39.9	27.8	17.2	6.7	54.6	7198

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
PERIOD

MAY
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAY	00-02	100.0	100.0	99.7	92.2	76.7	59.5	40.4	24.1	7.3	65.7	929
	03-05	100.0	100.0	99.9	96.5	84.0	65.6	48.0	28.8	8.7	68.8	930
	06-08	100.0	100.0	99.2	89.6	71.2	51.9	34.2	20.0	6.2	62.7	930
	09-11	100.0	98.4	83.8	55.1	35.7	24.2	17.1	8.6	2.4	48.1	930
	12-14	100.0	91.7	59.0	37.8	27.1	18.1	10.8	5.9	1.9	40.8	929
	15-17	100.0	82.9	54.2	36.1	25.8	18.7	12.8	7.3	2.2	39.8	930
	18-20	100.0	92.0	70.4	49.6	36.3	26.6	18.7	9.7	2.9	46.2	930
	21-23	100.0	99.5	93.7	80.4	61.4	46.9	33.1	18.6	4.7	59.5	930
TOTALS		100.0	95.6	82.5	67.2	52.3	38.9	26.9	15.4	4.5	54.0	7438

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
PERIOD

JUN
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUN	00-02	100.0	100.0	99.1	93.6	78.3	55.9	37.2	19.6	2.6	64.4	900
	03-05	100.0	100.0	99.3	96.4	86.3	65.7	45.0	22.6	4.6	67.7	900
	06-08	100.0	99.8	98.0	91.3	69.6	45.9	30.0	13.7	2.3	60.6	900
	09-11	100.0	98.2	83.9	54.3	33.2	21.8	13.0	4.3	.3	46.7	900
	12-14	100.0	89.8	58.9	36.3	23.0	14.0	8.3	2.3	.2	38.9	900
	15-17	100.0	86.0	53.9	33.3	20.7	14.4	7.7	1.6		37.3	900
	18-20	100.0	94.6	74.3	49.4	35.9	25.4	15.4	4.4	.3	45.6	900
	21-23	100.0	99.9	95.4	80.9	61.2	42.2	29.6	12.4	.9	57.9	900
TOTALS		100.0	96.0	82.9	66.9	51.0	35.7	23.3	10.1	1.4	52.4	7200

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77
PERIOD

JUL
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUL	00-02	100.0	100.0	96.7	84.7	61.6	37.6	20.8	9.7	1.5	57.1	930
	03-05	100.0	99.8	99.2	93.0	78.9	54.7	28.5	12.9	2.6	62.6	930
	06-08	100.0	100.0	96.9	83.3	58.4	36.0	18.6	6.4	.8	55.7	929
	09-11	100.0	95.2	70.3	41.0	20.4	9.9	5.7	1.6		40.1	930
	12-14	100.0	78.6	43.5	20.2	9.8	5.6	1.8	.1		31.5	930
	15-17	99.8	67.0	33.9	17.6	9.2	5.3	1.9	.6		28.8	930
	18-20	99.9	78.9	51.8	30.0	17.6	9.5	4.7	1.4	.1	35.0	930
	21-23	100.0	98.5	84.8	64.4	38.6	23.9	12.7	5.6	.2	48.8	930
TOTALS		100.0	89.8	72.1	54.3	36.8	22.8	11.8	4.8	.7	45.0	7439

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

RELATIVE HUMIDITY

24112
STATION

MALMSTROM AFB MT/GREAT FALLS
STATION NAME

68-77

PERIOD

AUG
MONTH

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
AUG	00-02	100.0	99.9	93.1	75.5	54.5	39.1	26.8	12.7	3.5	56.3	930
	03-05	100.0	100.0	98.0	85.8	66.6	48.4	34.1	18.5	5.1	61.4	930
	06-08	100.0	99.8	94.2	78.8	59.8	42.5	29.6	14.7	3.2	57.8	930
	09-11	100.0	90.9	65.6	43.8	26.9	16.1	9.6	4.5	.6	41.5	930
	12-14	99.9	70.3	43.4	25.2	14.1	8.4	5.4	2.6	.4	32.5	930
	15-17	99.5	62.4	37.3	23.9	4	7.8	4.8	1.9	.2	30.2	928
	18-20	99.9	75.3	53.2	35.2	22.9	15.7	9.7	3.9	.3	37.1	927
	21-23	100.0	96.1	78.4	60.2	44.4	30.2	18.8	9.0	1.1	49.5	927
								/				
TOTALS		99.9	86.8	70.4	53.6	37.7	26.0	17.4	8.5	1.8	45.8	7432

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112 MALMSTROM AFB MT/GREAT FALLS
STATION STATION NAME

68-77
PERIOD

SEP
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
SEP	00-02	100.0	99.6	97.0	89.4	74.3	52.6	29.1	12.6	3.4	61.5	900
	03-05	100.0	99.6	98.2	93.4	81.3	61.6	38.0	16.9	4.6	65.1	900
	06-08	100.0	99.8	96.8	90.1	75.9	57.3	36.0	17.2	5.0	63.5	900
	09-11	100.0	96.7	82.0	58.1	35.4	21.7	14.0	6.9	1.4	47.2	900
	12-14	99.7	86.0	54.2	30.1	18.6	12.5	7.6	3.3	.6	36.8	898
	15-17	99.4	78.6	48.9	24.9	15.7	10.3	6.7	2.9	.6	34.2	900
	18-20	100.0	94.2	76.7	50.9	29.7	18.8	11.2	6.6	1.6	44.4	900
	21-23	100.0	99.4	92.4	79.4	58.1	38.9	23.0	10.2	2.6	55.9	900
TOTALS		99.9	94.2	80.8	64.5	48.6	34.2	20.7	9.6	2.5	51.1	7198

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112 MALMSTROM AFB MT/GREAT FALLS

68-77

OCT
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
OCT	00-02	100.0	99.6	96.6	87.2	71.2	51.1	34.3	20.6	6.2	62.3	930
	03-05	100.0	99.8	97.1	89.1	74.1	56.0	39.7	25.2	7.8	64.4	930
	06-08	100.0	99.9	96.1	87.6	71.2	54.2	40.9	26.6	9.8	64.1	930
	09-11	100.0	96.2	83.3	61.6	41.9	29.9	20.9	13.8	4.3	50.8	929
	12-14	100.0	88.5	65.5	37.3	25.7	17.7	11.1	7.2	2.7	41.0	930
	15-17	100.0	88.6	63.1	37.3	23.9	18.4	11.5	6.9	1.5	40.8	930
	18-20	100.0	98.5	88.6	68.3	47.3	31.2	21.3	12.6	2.9	52.5	930
	21-23	100.0	99.0	96.5	84.4	64.6	44.7	28.4	17.8	6.2	59.7	930
TOTALS		100.0	96.3	85.9	69.1	52.5	37.9	26.0	16.3	5.2	54.5	7439

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112 MALMSTROM AFB MT/GREAT FALLS
STATION STATION NAME

68-77
PERIOD

NOV
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NOV	00-02	100.0	99.7	96.6	87.7	74.6	56.1	35.8	21.7	8.2	63.5	900
	03-05	100.0	99.7	96.4	89.1	75.6	57.6	40.2	22.9	9.6	64.5	899
	06-08	100.0	99.7	95.8	87.8	74.8	57.7	40.6	23.9	7.7	64.4	900
	09-11	100.0	98.6	90.0	74.4	57.3	42.2	30.0	17.7	6.3	57.1	900
	12-14	100.0	95.1	80.9	53.0	38.2	30.0	21.6	11.8	3.7	49.0	900
	15-17	100.0	97.0	83.6	59.5	43.2	31.0	21.8	11.0	2.6	50.4	899
	18-20	100.0	99.3	95.3	82.6	64.3	45.9	29.1	17.9	5.5	59.4	897
	21-23	100.0	100.0	95.4	87.4	72.1	53.7	33.3	19.6	6.6	62.2	897
TOTALS		100.0	98.6	91.8	77.7	62.5	46.8	31.6	18.3	6.3	58.8	7192

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112
STATION

MALMSTRDM AFB MT/GREAT FALLS
STATION NAME

67-76
PERIOD

DEC
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
DEC	00-02	100.0	100.0	98.9	93.3	82.1	61.7	37.5	18.9	5.3	65.4	927
	03-05	100.0	100.0	98.8	93.2	83.8	62.5	38.1	19.5	5.4	65.8	925
	06-08	100.0	100.0	98.3	94.1	82.3	65.0	40.2	21.2	5.3	66.0	928
	09-11	100.0	99.7	96.2	88.8	72.3	52.2	32.5	17.3	5.4	61.8	928
	12-14	100.0	98.3	91.7	73.8	57.7	40.8	25.9	13.9	3.9	56.0	929
	15-17	100.0	98.7	93.9	78.9	62.3	41.2	25.1	14.7	5.0	57.3	928
	18-20	100.0	100.0	97.8	90.3	78.1	56.4	32.5	16.3	5.1	63.2	926
	21-23	100.0	100.0	99.3	93.8	81.6	57.3	37.1	16.7	4.2	64.5	922
TOTALS		100.0	99.6	96.	88.3	75.0	54.9	33.6	17.3	5.0	62.5	7413

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

24112 MALMSTRUM AFB MT/GREAT FALLS

67-77

ALL

STATION

STATION NAME

PERIOD

MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO. OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	ALL	100.0	99.8	98.2	92.7	81.6	58.3	26.5	9.4	2.5	62.5	7430
FEB		100.0	99.2	95.1	86.0	73.9	54.2	32.7	15.8	5.2	61.8	6714
MAR		100.0	99.1	90.3	77.5	63.8	48.2	32.4	18.3	6.7	59.1	7438
APR		100.0	95.7	82.5	67.6	53.2	39.9	27.8	17.2	6.7	54.6	7198
MAY		100.0	95.6	82.5	67.2	52.3	38.9	26.9	15.4	4.5	54.0	7438
JUN		100.0	96.0	82.9	66.9	51.0	35.7	23.3	10.1	1.4	52.4	7200
JUL		100.0	89.8	72.1	54.3	36.8	22.8	11.8	4.8	.7	45.0	7439
AUG		99.9	86.8	70.4	53.6	37.7	26.0	17.4	8.5	1.8	45.8	7432
SEP		99.9	94.2	80.8	64.5	48.6	34.2	20.7	9.6	2.5	51.1	7198
OCT		100.0	96.3	85.9	69.1	52.5	37.9	26.0	16.3	5.2	54.5	7439
NOV		100.0	98.6	91.8	77.7	62.5	46.8	31.6	18.3	6.3	58.8	7192
DEC		100.0	99.6	96.9	88.3	75.0	54.9	33.6	17.3	5.0	62.5	7413
TOTALS		100.0	95.9	85.8	72.1	57.4	41.5	25.9	13.4	4.0	55.2	87531

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART F

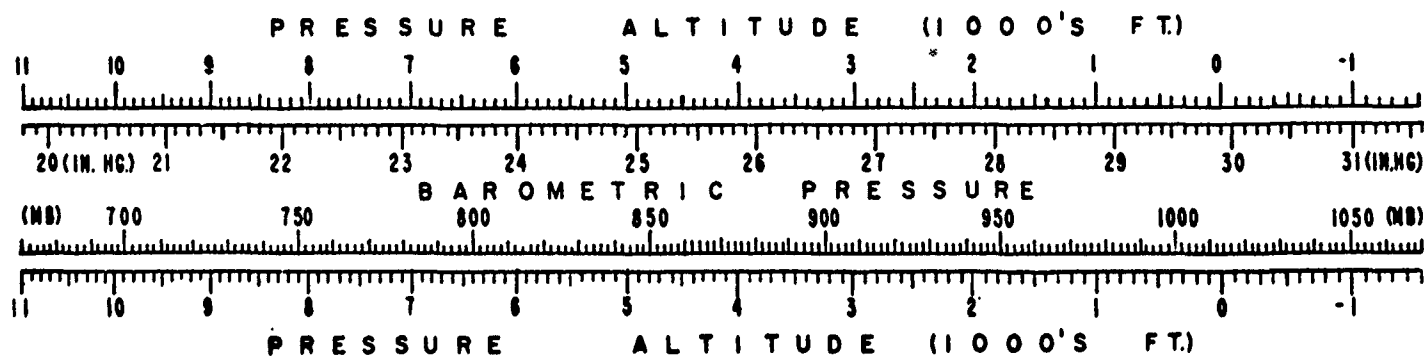
PRESSURE SUMMARY

Presented in this part are two tables giving the means, standard deviations, and total number of observations of station pressure and sea-level pressure by month and annual for the local hourly observations corresponding to the eight 3-hourly synoptic times GCT. The same computations are also provided at the bottom of the page for all hours combined. All years of data available are combined in both of these tables, although the overall period is limited by service as indicated below.

NOTES: Station pressure not reported for all services until late in 1945.
Station pressure reported only at 6-hourly times for Air Force stations from Jan 64 - Jul 65.
METAR stations do not report Sea-level pressure for the period Jan 68 - Dec 70.

1. Station pressure is presented in the table in inches of mercury.
2. Sea-level pressure is presented in millibars.

Provided below is a scale to convert station pressure values in inches of mercury or millibars to pressure-altitude in 1000's of feet. This scale is an enlarged model of the pressure-altitude scale in the Smithsonian Meteorological Tables.



DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

STATION PRESSURE IN INCHES HG FROM HOURLY OBSERVATIONS

24112 MALMSTROM AFB MT/GREAT FALLS 67-77

STATION		STATION NAME												YEARS	
HRS ILST		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
02	MEAN	26.269	26.300	26.247	26.280	26.293	26.289	26.364	26.344	26.358	26.350	26.315	26.261	26.305	
	S D	.216	.211	.201	.174	.166	.133	.120	.111	.173	.182	.206	.201	.182	
	TOTAL OBS	293	273	301	296	303	296	285	288	295	302	293	298	3523	
05	MEAN	26.263	26.297	26.244	26.280	26.299	26.292	26.376	26.351	26.361	26.348	26.313	26.262	26.307	
	S D	.217	.210	.202	.176	.168	.134	.122	.113	.174	.184	.211	.209	.185	
	TOTAL OBS	288	276	297	292	304	292	283	289	294	300	286	300	3501	
08	MEAN	26.269	26.302	26.258	26.294	26.315	26.306	26.393	26.368	26.372	26.361	26.320	26.267	26.318	
	S D	.221	.211	.201	.176	.172	.134	.122	.115	.176	.188	.211	.207	.186	
	TOTAL OBS	292	277	305	296	303	294	282	293	294	297	294	304	3531	
11	MEAN	26.286	26.316	26.259	26.288	26.305	26.296	26.381	26.357	26.368	26.361	26.323	26.284	26.318	
	S D	.219	.215	.200	.176	.171	.133	.122	.117	.175	.192	.215	.209	.186	
	TOTAL OBS	290	272	306	296	301	295	285	293	296	301	294	308	3537	
14	MEAN	26.252	26.286	26.228	26.269	26.280	26.272	26.351	26.326	26.338	26.326	26.292	26.244	26.288	
	S D	.216	.217	.205	.176	.167	.132	.120	.117	.171	.190	.212	.203	.184	
	TOTAL OBS	294	279	302	295	304	293	286	295	292	299	295	300	3534	
17	MEAN	26.265	26.283	26.223	26.255	26.267	26.257	26.328	26.307	26.333	26.327	26.302	26.260	26.284	
	S D	.214	.212	.204	.176	.163	.130	.123	.117	.164	.185	.211	.197	.181	
	TOTAL OBS	294	271	304	295	300	294	284	287	293	303	289	303	3517	
20	MEAN	26.270	26.298	26.238	26.271	26.274	26.265	26.340	26.318	26.347	26.338	26.311	26.270	26.294	
	S D	.210	.211	.202	.174	.161	.130	.117	.116	.165	.182	.213	.193	.179	
	TOTAL OBS	291	274	305	294	303	292	279	293	294	302	292	305	3524	
23	MEAN	26.265	26.301	26.247	26.286	26.292	26.287	26.362	26.340	26.357	26.348	26.310	26.276	26.306	
	S D	.215	.208	.204	.174	.160	.133	.118	.114	.170	.184	.210	.196	.181	
	TOTAL OBS	291	277	307	297	301	298	286	287	296	305	294	294	3533	
ALL HOURS	MEAN	26.267	26.298	26.243	26.278	26.291	26.283	26.362	26.339	26.354	26.345	26.311	26.265	26.303	
	S D	.216	.212	.202	.175	.166	.133	.122	.116	.171	.186	.211	.202	.183	
	TOTAL OBS	2333	2199	2427	2361	2419	2354	2270	2325	2354	2409	2337	2412	28200	

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

SEA LEVEL PRESSURE IN MBS FROM HOURLY OBSERVATIONS

24112 MALMSTRUM AFB MT/GREAT FALLS 67-77

STATION		STATION NAME											YEARS	
HRS (LST)		JAN	FEB	MAR.	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
02	MEAN	1017.3	1016.7	1013.8	1013.7	1012.9	1011.5	1013.6	1012.9	1014.8	1015.8	1016.1	1015.4	1014.5
	S D	10.139	8.916	8.952	7.614	6.760	5.566	4.935	4.693	7.372	7.973	8.951	8.934	7.912
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	300	310	3653
05	MEAN	1017.4	1016.8	1013.9	1013.9	1013.3	1011.9	1014.2	1013.3	1015.0	1016.1	1016.5	1015.7	1014.8
	S D	10.170	8.860	8.876	7.561	6.809	5.523	4.887	4.678	7.426	8.037	9.030	9.012	7.910
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	300	310	3653
08	MEAN	1017.8	1017.5	1014.7	1014.7	1013.7	1012.2	1014.8	1014.0	1015.9	1016.9	1017.0	1016.1	1015.4
	S D	10.264	8.971	8.789	7.479	6.906	5.405	4.909	4.713	7.464	8.089	9.128	9.064	7.906
	TOTAL OBS	310	283	310	300	309	300	310	310	300	310	300	310	3652
11	MEAN	1018.1	1017.5	1014.3	1014.3	1013.3	1011.8	1014.3	1013.5	1015.3	1016.4	1016.7	1016.2	1015.1
	S D	10.204	9.009	8.877	7.457	6.807	5.397	4.881	4.820	7.390	8.185	9.178	9.039	7.983
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	300	310	3653
14	MEAN	1017.4	1016.0	1013.1	1013.2	1012.4	1010.8	1013.1	1012.3	1014.0	1014.9	1015.3	1014.8	1013.9
	S D	10.46	9.142	8.886	7.533	6.780	5.464	4.896	4.874	7.275	8.132	9.078	8.964	7.933
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	300	310	3653
17	MEAN	1017.2	1016.2	1013.0	1012.9	1012.0	1010.3	1012.3	1011.6	1013.8	1015.2	1016.0	1015.7	1013.8
	S D	9.992	8.818	8.890	7.507	6.618	5.379	4.922	4.862	7.048	7.902	9.088	8.797	7.924
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	299	310	3652
20	MEAN	1017.6	1017.1	1014.1	1013.6	1012.2	1010.6	1012.6	1012.1	1014.8	1016.1	1016.6	1016.3	1014.5
	S D	9.973	8.993	8.889	7.587	6.560	5.351	4.799	4.832	7.084	7.871	9.205	8.679	7.966
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	299	310	3652
23	MEAN	1017.4	1016.9	1014.0	1014.0	1012.9	1011.5	1013.6	1012.8	1014.9	1016.0	1016.2	1016.1	1014.7
	S D	10.179	8.942	9.102	7.532	6.610	5.502	4.859	4.840	7.308	7.966	9.101	8.797	7.931
	TOTAL OBS	310	283	310	300	310	300	310	310	300	310	299	310	3652
ALL HOURS	MEAN	1017.4	1016.8	1013.8	1013.8	1012.8	1011.3	1013.6	1012.8	1014.8	1015.9	1016.3	1015.8	1014.6
	S D	10.128	8.958	8.911	7.542	6.745	5.476	4.945	4.840	7.313	8.031	9.095	8.912	7.954
	TOTAL OBS	2480	2264	2480	2400	2479	2400	2480	2480	2400	2480	2397	2480	29220